

OM nucleic - nucleic search, using sw model

Run on: October 14, 2004, 19:00:14 ; Search time 3342.03 Seconds  
(without alignments)

8442.862 Million cell updates/sec

Title: US-09-407-804A-5

Perfect score: 651  
Sequence: 1 atgaacggagcaataaataag.....acaaagagagatttaactga 651

Scoring table: OLIGO\_NUC

Gapop 60.0 , Gapext 60.0

Searched: 3470272 seqs, 2167151695 residues

Word size : 0

Total number of hits satisfying chosen parameters: 6940544

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database :

GenEmbl: +  
1: gb\_ba: +  
2: gb\_hgt: +  
3: gb\_in: +  
4: gb\_ov: +  
5: gb\_ov: +  
6: gb\_pat: +  
7: gb\_ph: +  
8: gb\_pl: +  
9: gb\_pr: +  
10: gb\_ro: +  
11: gb\_sce: +  
12: gb\_sy: +  
13: gb\_un: +  
14: gb\_vl: +  
15: em\_ba: +  
16: em\_fun: +  
17: em\_hum: +  
18: em\_in: +  
19: em\_mu: +  
20: em\_on: +  
21: em\_or: +  
22: em\_ov: +  
23: em\_pat: +  
24: em\_ph: +  
25: em\_pl: +  
26: em\_ro: +  
27: em\_sce: +

28: em\_un: +  
29: em\_vl: +  
30: em\_hgt\_hum: +  
31: em\_hgt\_inv: +  
32: em\_hgt\_other: +  
33: em\_hgt\_mus: +  
34: em\_hgt\_pih: +  
35: em\_hgt\_rtd: +  
36: em\_hgt\_mam: +  
37: em\_hgt\_vrt: +  
38: em\_sy: +  
39: em\_hgt\_hum: +  
40: em\_hgt\_mus: +  
41: em\_hgt\_other: +

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	651	100.0	651	6	BD245276
2	651	100.0	41401	7	AB009866
3	651	100.0	41708	6	BD245281
4	651	100.0	41708	6	AR368770
5	651	100.0	272850	1	AP004828
6	25	3.8	236256	2	AC130112
7	23	3.5	5169	3	AF298201
8	23	3.5	226995	2	BX372639
9	23	3.5	234851	5	BX005175
10	23	3.5	310003	1	AE014016
11	22	3.4	2473	8	SCYGR052W
12	22	3.4	4049	2	AC014940
13	22	3.4	4472	6	IND64927
14	22	3.4	6764	3	PPAPOLA
15	22	3.4	13449	6	AX346286
16	22	3.4	54812	8	YSCCHR1RAA
17	22	3.4	87841	8	AB005247
18	22	3.4	95906	9	AC008704
19	22	3.4	104685	9	AL589923
20	22	3.4	136240	3	AC117070
21	22	3.4	153550	2	AL354894
22	22	3.4	153550	2	AL355523
23	22	3.4	153607	2	AC116048
24	22	3.4	155321	2	AC116048
25	22	3.4	161517	9	AC009520
26	22	3.4	166113	2	AC016532
27	22	3.4	170136	9	AL356432
28	22	3.4	171653	9	AC080162
29	22	3.4	171670	2	AC110944
30	22	3.4	178357	2	AC018759
31	22	3.4	179722	2	AC131457
32	22	3.4	184359	10	AC121861
33	22	3.4	185269	2	AC073963

34	c	3.4	197611	9	AL1390840	AL1390840 Human DNA	91	21	3.2	178953	3	AC0924400	AC0924400 Drosophila
35	c	3.4	204056	9	AL160397	AL160397 Human DNA	92	21	3.2	182165	9	AC0934429	AC0934429 Homo sapi
36	c	3.4	210107	9	AL165214	AL165214 Human DNA	93	21	3.2	183866	2	BX855593	BX855593 Dario rer
37	c	3.4	217405	2	AC102588	AC102588 Mus muscu	94	21	3.2	183943	2	AC125506	AC125506 Papio anu
38	c	3.4	234081	3	PFMALP2	AL035475 Plasmodu	95	21	3.2	186308	9	AC026739	AC026739 Homo sapi
39	c	3.4	235497	2	AC14302	AC094302 Rattus no	96	21	3.2	186634	2	AC100722	AC100722 Mus muscu
40	c	3.4	243259	2	AC127409	AC127409 Rattus no	97	21	3.2	186717	9	CNS01DMR	AC100722 Mus muscu
41	c	3.4	248013	2	AC098092	AC098092 Rattus no	98	21	3.2	189505	9	AC092138	AC092138 Human chr
42	c	3.4	254398	2	AC137385	AC137385 Rattus no	99	21	3.2	192815	9	AC013444	AC013444 Homo sapi
43	c	3.4	302300	1	AP003186	AP003186 Clostrid	100	21	3.2	194832	9	AC025287	AC025287 Homo sapi
44	c	3.4	306037	1	AE014017	AE014017 Buchnera	101	21	3.2	197246	2	AC118774	AC118774 Homo sapi
45	c	3.2	325350	1	AP004823	AP004823 Staphyloc	102	21	3.2	197389	9	AL358791	AC118774 Rattus no
46	c	3.2	438	6	BD269146	BD269146 Methanoc	103	21	3.2	200364	10	AL844901	AL358791 Human DNA
47	c	3.2	530	11	GB0304	GB0304 S208P6427RE	104	21	3.2	203364	9	AC090962	AL844901 Mouse DNA
48	c	3.2	536	11	GB1464	GB1464 S208P6591F	105	21	3.2	207345	9	AC024558	AC090962 Homo sapi
49	c	3.2	42430	3	AF003386	AF003386 Caenorhab	106	21	3.2	216161	9	AC024558	AC024558 Homo sapi
50	c	3.2	51590	2	AC145453	AC145453 Cicer ari	107	21	3.2	225956	2	BX842688	BX842688 Dario rer
51	c	3.2	60232	1	AE001272	AE001272 Lactococc	108	21	3.2	231309	2	AC145303	AC145303 Mus muscu
52	c	3.2	63638	2	AC020175	AC020175 Drosophila	109	21	3.2	237411	2	AC127402	AC127402 Rattus no
53	c	3.2	75167	2	AC017342	AC017342 Drosophila	110	21	3.2	237983	2	AE003643	AE003643 Mus muscu
54	c	3.2	82854	10	AL626778	AL626778 Mouse DNA	111	21	3.2	240144	3	AE003643	AE003643 Drosophila
55	c	3.2	98492	8	AP006085	AP006085 Lotus cor	112	21	3.2	249661	2	AC094299	AC094299 Rattus no
56	c	3.2	104961	9	AC004075	AC004075 Homo sapi	113	21	3.2	254946	2	AL844587	AL844587 Dario rer
57	c	3.2	106277	9	AL359554	AL359554 Human DNA	114	21	3.2	257109	3	AC135577	AC135577 Dictyoste
58	c	3.2	112695	8	AC119418	AC119418 Medicago	115	21	3.2	267293	2	AC134614	AC134614 Mus muscu
59	c	3.2	116491	9	AC105942	AC105942 Homo sapi	116	21	3.2	275699	3	AE003649	AE003649 Drosophila
60	c	3.2	121623	9	AC002412	AC002412 Homo sapi	117	21	3.2	299935	3	DR05ADH09	AE003649 Drosophila
61	c	3.2	126255	3	AY319931	AY319931 P. tritolic	118	21	3.2	305502	3	DR05ADH09	AE003649 Drosophila
62	c	3.2	126781	2	AC016375	AC016375 Homo sapi	119	21	3.2	340552	3	PF929334	PF929334 Plasmodu
63	c	3.2	130043	8	AC126019	AC126019 Medicago	120	20	3.1	291	11	AU049248	AU049248 Rattus no
64	c	3.2	133090	8	AC098693	AC098693 Oryza sat	121	20	3.1	454	6	AX336874	AX336874 Sequence
65	c	3.2	135837	9	AC004837	AC004837 Homo sapi	122	20	3.1	492	6	BD244098	BD244098 Determina
66	c	3.2	135873	2	AC012847	AC012847 Homo sapi	123	20	3.1	696	8	AX121662	AX121662 Oryza sat
67	c	3.2	138831	8	AC140005	AC140005 Oryza sat	124	20	3.1	834	9	BC063494	BC063494 Homo sapi
68	c	3.2	142003	2	BX897661	BX897661 Dario rer	125	20	3.1	1388	9	DB4107	DB4107 Homo sapi
69	c	3.2	149273	10	AL928732	AL928732 Mouse DNA	126	20	3.1	1577	3	AX115445	AX115445 Homo sapi
70	c	3.2	153784	2	BX322589	BX322589 Dario rer	127	20	3.1	1594	9	DB4110	DB4110 Homo sapi
71	c	3.2	154259	9	AC013284	AC013284 Homo sapi	128	20	3.1	2126	8	MTL82	MTL82 Homo sapi
72	c	3.2	155353	2	BX323021	BX323021 Homo sapi	129	20	3.1	2126	8	AX835291	AX835291 Sequence
73	c	3.2	156100	2	AC011934	AC011934 Homo sapi	130	20	3.1	2668	6	AK098281	AK098281 Homo sapi
74	c	3.2	157482	3	AC092227	AC092227 Drosophila	131	20	3.1	2668	6	AK098281	AK098281 Homo sapi
75	c	3.2	157722	3	AC092227	AC092227 Drosophila	132	20	3.1	2826	8	HNNHAG3D15	HNNHAG3D15 Sequence
76	c	3.2	158315	9	AL160267	AL160267 Human DNA	133	20	3.1	3965	9	AX124859	AX124859 Sunflower
77	c	3.2	158630	2	AC124225	AC124225 Mus muscu	134	20	3.1	6137	2	AC147333	AC147333 Homo sapi
78	c	3.2	159265	2	AC119839	AC119839 Mus muscu	135	20	3.1	6196	8	CTR296093	CTR296093 Homo sapi
79	c	3.2	160302	2	AC068818	AC068818 Homo sapi	136	20	3.1	7689	3	AX458643	AX458643 Sequence
80	c	3.2	161304	2	AC016174	AC016174 Homo sapi	137	20	3.1	10176	3	DMT1MEL1	DMT1MEL1 Candida t
81	c	3.2	161341	2	AL929055	AL929055 Mus muscu	138	20	3.1	10575	2	AE001370	AE001370 Plasmodu
82	c	3.2	162797	2	AC112974	AC112974 Mus muscu	139	20	3.1	10855	6	AX346391	AX346391 Sequence
83	c	3.2	164396	9	AC108034	AC108034 Homo sapi	140	20	3.1	11014	1	AE010501	AE010501 Fusedacte
84	c	3.2	164764	2	AC129624	AC129624 Homo sapi	141	20	3.1	11180	1	AF329100	AF329100 Bacteroid
85	c	3.2	167389	2	AC115926	AC115926 Mus muscu	142	20	3.1	13684	3	AE001403	AE001403 Plasmodu
86	c	3.2	168273	2	AC010812	AC010812 Homo sapi	143	20	3.1	13818	2	AC108445	AC108445 Homo sapi
87	c	3.2	171930	9	AL450334	AL450334 Human DNA	144	20	3.1	14335	6	AR408732	AR408732 Sequence
88	c	3.2	177130	2	AC019551	AC019551 Homo sapi	145	20	3.1	14335	6	AK067436	AK067436 Sequence
89	c	3.2	177293	9	AC146401	AC146401 Pan trogl	146	20	3.1	17691	3	CEP57A10	CEP57A10 Caenorhabdi
90	c	3.2	177865	9	AC098483	AC098483 Homo sapi	147	20	3.1	18005	8	LES312093	LES312093 Lycopersi

148	20	3.1	18585	6	AX281497	AX281497 Sequence	205	20	3.1	141529	2	AC108979	AC108979 Rattus no
149	20	3.1	21206	1	AE002104	AE002104 Ureaplasma	206	20	3.1	142080	9	AC079748	AC079748 Homo sapi
150	20	3.1	28000	3	CEC15H7	222173 Caenorhabdi	207	20	3.1	142557	9	AL356499	AL356499 Human DNA
151	20	3.1	30225	3	CEP29C12	281519 Caenorhabdi	208	20	3.1	146286	9	AC027141	AC027141 Homo sapi
152	20	3.1	33650	3	CEK01A11	266514 Caenorhabdi	209	20	3.1	147098	9	AC008651	AC008651 Homo sapi
153	20	3.1	39897	2	AC020039	AC020039 Drosophila	210	20	3.1	148109	8	AP003378	AP003378 Homo sapi
154	20	3.1	60923	2	AC091586	AC091586 Homo sapi	211	20	3.1	148978	2	AC134399	AC134399 Homo sapi
155	20	3.1	64263	9	AC132660	AC132660 Homo sapi	212	20	3.1	149169	5	AL840630	AL840630 Zebrafish
156	20	3.1	68719	2	AC106005	AC106005 Homo sapi	213	20	3.1	151162	2	AC025601	AC025601 Homo sapi
157	20	3.1	69674	9	AL136130	AL136130 Human DNA	214	20	3.1	151843	2	AC009599	AC009599 Homo sapi
158	20	3.1	70392	2	AC079105	AC079105 Homo sapi	215	20	3.1	152595	2	AC140167	AC140167 Homo sapi
159	20	3.1	77273	8	AB022223	AB022223 Arabidops	216	20	3.1	154199	2	BX321872	BX321872 Dantio rer
160	20	3.1	78167	2	AC023422	AC023422 Homo sapi	217	20	3.1	155047	2	AL390120	AL390120 Homo sapi
161	20	3.1	78341	8	F1003	AC006530 Arabidops	218	20	3.1	155344	9	AC026407	AC026407 Homo sapi
162	20	3.1	79895	2	AC100317	AC100317 Mus muscu	219	20	3.1	155868	2	AC101929	AC101929 Mus muscu
163	20	3.1	80743	9	AL162402	AL162402 Human DNA	220	20	3.1	155874	2	BX004782	BX004782 Homo sapi
164	20	3.1	81587	3	AF003135	AF003135 Caenorhab	221	20	3.1	156534	10	AC127552	AC127552 Mus muscu
165	20	3.1	84554	8	AC123571	AC123571 Medicago	222	20	3.1	157523	9	AC024106	AC024106 Homo sapi
166	20	3.1	84891	9	AC011424	AC011424 Homo sapi	223	20	3.1	158126	8	AP003245	AP003245 Oryza sat
167	20	3.1	86334	2	AC021610	AC021610 Homo sapi	224	20	3.1	158709	2	AC083827	AC083827 Homo sapi
168	20	3.1	88010	2	ATT14D3	AL138649 Arabidops	225	20	3.1	159236	9	AC116158	AC116158 Homo sapi
169	20	3.1	96217	9	AL645729	AL645729 Human DNA	226	20	3.1	159390	9	AC092823	AC092823 Homo sapi
170	20	3.1	97579	2	AC146722	AC146722 Medicago	227	20	3.1	159648	2	BX294128	BX294128 Homo sapi
171	20	3.1	99415	3	CEV54G11A	AL034488 Caenorhab	228	20	3.1	160925	8	AP004332	AP004332 Dantio rer
172	20	3.1	99859	9	AL159999	AL159999 Human DNA	229	20	3.1	161474	2	AC144356	AC144356 Dantio rer
173	20	3.1	100288	2	AP001945	AP001945 Homo sapi	230	20	3.1	162436	2	AC083825	AC083825 Homo sapi
174	20	3.1	101047	9	ALJ65227	ALJ65227 Human DNA	231	20	3.1	163179	9	AC022541	AC022541 Homo sapi
175	20	3.1	101846	9	AL450324	AL450324 Human DNA	232	20	3.1	163576	10	AL807744	AL807744 Mouse DNA
176	20	3.1	102653	14	CYS5C	163545 Lymphocyti	233	20	3.1	163970	3	AC010580	AC010580 Drosophila
177	20	3.1	110000	2	AL954766_2	Continuation (3 of	234	20	3.1	164153	2	AC138833	AC138833 Homo sapi
178	20	3.1	110000	2	BX004762_0	BX004762 Mus muscu	235	20	3.1	164809	9	AC128690	AC128690 Homo sapi
179	20	3.1	110000	2	BX004762_3	Continuation (4 of	236	20	3.1	165043	2	AC021432	AC021432 Homo sapi
180	20	3.1	110000	2	BX546444_00	BX546444 Homo sapi	237	20	3.1	165067	9	AL138927	AL138927 Human DNA
181	20	3.1	110000	2	PFA0113_25	Continuation (26 of	238	20	3.1	165330	10	AC087223	AC087223 Mus muscu
182	20	3.1	110000	10	AE014175_1	Continuation (2 of	239	20	3.1	165392	2	AC011670	AC011670 Homo sapi
183	20	3.1	110261	9	AL807401	AL807401 Mouse DNA	240	20	3.1	165693	9	AC087879	AC087879 Homo sapi
184	20	3.1	111182	8	AL359771	AL359771 Human DNA	241	20	3.1	165870	9	AC025089	AC025089 Homo sapi
185	20	3.1	111767	8	F21E10	AF058814 Arabidops	242	20	3.1	166462	2	AC138785	AC138785 Sus scrofa
186	20	3.1	111779	9	AL159988	AL159988 Human DNA	243	20	3.1	166839	2	AL359391	AL359391 Homo sapi
187	20	3.1	112025	5	AL591418	AL591418 Zebrafish	244	20	3.1	167396	3	AC010579	AC010579 Drosophila
188	20	3.1	112424	9	HS1013A10	AL033383 Human DNA	245	20	3.1	168066	2	AC026902	AC026902 Homo sapi
189	20	3.1	116521	9	HSJ652B22	AL049825 Human DNA	246	20	3.1	168270	8	AC083943	AC083943 Homo sapi
190	20	3.1	120644	9	AC146041	AC146041 Pan trogl	247	20	3.1	169490	9	AC091910	AC091910 Homo sapi
191	20	3.1	121963	9	AL162397	AL162397 Human DNA	248	20	3.1	169630	2	AC139788	AC139788 Homo sapi
192	20	3.1	122052	8	AC079633	AC079633 Genomic S	249	20	3.1	170064	3	AC008323	AC008323 Drosophila
193	20	3.1	122889	9	HS0A204F4	AL121878 Human DNA	250	20	3.1	171274	2	AC140166	AC140166 Homo sapi
194	20	3.1	123336	9	AC003075	AC003075 Homo sapi	251	20	3.1	171410	2	AC107689	AC107689 Mus muscu
195	20	3.1	123661	9	AC096661	AC096661 Homo sapi	252	20	3.1	171562	9	AC107027	AC107027 Homo sapi
196	20	3.1	125623	3	AC115599	AC115599 Dictyoste	253	20	3.1	172289	9	AC126767	AC126767 Homo sapi
197	20	3.1	125782	9	AC090365	AC090365 Homo sapi	254	20	3.1	172321	9	AC109631	AC109631 Homo sapi
198	20	3.1	126531	8	AP003379	AP003379 Oryza sat	255	20	3.1	172436	3	AC009751	AC009751 Drosophila
199	20	3.1	127039	2	AF252826	AF252826 Homo sapi	256	20	3.1	173288	2	BX640589	BX640589 Dantio rer
200	20	3.1	127039	2	AP001127	AP001127 Homo sapi	257	20	3.1	174143	5	AL929315	AL929315 Zebrafish
201	20	3.1	127677	9	AC102945	AC102945 Homo sapi	258	20	3.1	174189	2	AC145800	AC145800 Silurana
202	20	3.1	130583	2	AC007420	AC007420 Drosophila	259	20	3.1	174701	2	AC007625	AC007625 Genomic S
203	20	3.1	130984	2	AC022766	AC022766 Homo sapi	260	20	3.1	175010	2	AC114587	AC114587 Mus muscu
204	20	3.1	132182	9	AC092916	AC092916 Homo sapi	261	20	3.1	176275	2	AC025551	AC025551 Homo sapi

c 262	20	3.1 177018	2	AC099716	AC099716 Mus muscu	319	20	3.1 230827	2	AC130625	AC130625 Rattus no
c 263	20	3.1 178273	2	AC005308	AC005308 Plasmodi	320	20	3.1 231647	2	AC114203	AC114203 Rattus no
c 264	20	3.1 178428	9	AL591485	AL591485 Human DNA	321	20	3.1 231910	2	AC128365	AC128365 Rattus no
c 265	20	3.1 178761	2	AC132630	AC132630 Rattus no	c 322	20	3.1 232323	2	AC127590	AC127590 Mus muscu
c 266	20	3.1 179173	10	AL669973	AL669973 Mouse DNA	323	20	3.1 233244	2	AC128266	AC128266 Rattus no
c 267	20	3.1 180225	9	AC104125	AC104125 Homo sapi	324	20	3.1 238560	2	AC114016	AC114016 Rattus no
c 268	20	3.1 180303	2	AC018969	AC018969 Homo sapi	c 325	20	3.1 240145	2	AC097778	AC097778 Rattus no
c 269	20	3.1 180461	1	AF250878	AF250878 Salmonell	c 326	20	3.1 240288	2	BK371102	BK371102 Dantlo rer
c 270	20	3.1 181166	9	AC087897	AC087897 Homo sapi	c 327	20	3.1 241570	2	AC125268	AC125268 Mus muscu
c 271	20	3.1 182020	9	AC113170	AC113170 Homo sapi	328	20	3.1 242416	2	AC133404	AC133404 Rattus no
c 272	20	3.1 183297	9	AC138804	AC138804 Homo sapi	329	20	3.1 244237	2	AC121060	AC121060 Rattus no
c 273	20	3.1 183410	2	BK511067	BK511067 Dantlo rer	c 330	20	3.1 246199	2	AC119558	AC119558 Rattus no
c 274	20	3.1 184110	2	AC110532	AC110532 Mus muscu	331	20	3.1 246990	2	AC136585	AC136585 Rattus no
c 275	20	3.1 185967	2	AC113543	AC113543 Mus muscu	c 332	20	3.1 247151	2	AC098067	AC098067 Rattus no
c 276	20	3.1 186011	2	AC025826	AC025826 Homo sapi	c 333	20	3.1 247402	10	AC125187	AC125187 Rattus no
c 277	20	3.1 187516	2	AC138845	AC138845 Homo sapi	c 334	20	3.1 249943	3	AE014823	AE014823 Rattus no
c 278	20	3.1 189308	9	AC040896	AC040896 Homo sapi	c 335	20	3.1 250029	3	AE014816	AE014816 Rattus no
c 279	20	3.1 189709	9	AL160275	AL160275 Human DNA	c 336	20	3.1 250663	3	AE014826	AE014826 Rattus no
c 280	20	3.1 191108	9	AC140168	AC140168 Homo sapi	337	20	3.1 250906	2	AC123491	AC123491 Rattus no
c 281	20	3.1 191135	2	AC128919	AC128919 Rattus no	338	20	3.1 253120	2	AC097099	AC097099 Rattus no
c 282	20	3.1 191334	2	BK323462	BK323462 Dantlo rer	339	20	3.1 253132	3	AE014846	AE014846 Plasmodi
c 283	20	3.1 191775	2	AC074358	AC074358 Mus muscu	340	20	3.1 253772	2	AC109777	AC109777 Rattus no
c 284	20	3.1 192550	2	AC026103	AC026103 Homo sapi	c 341	20	3.1 253924	3	AE014822	AE014822 Rattus no
c 285	20	3.1 193029	2	AL355594	AL355594 Homo sapi	c 342	20	3.1 255434	2	AC130154	AC130154 Rattus no
c 286	20	3.1 193444	8	AF229199	AF229199 Oryza sat	c 343	20	3.1 257453	2	AC128592	AC128592 Rattus no
c 287	20	3.1 194149	9	AC100799	AC100799 Homo sapi	c 344	20	3.1 257727	2	AC138616	AC138616 Rattus no
c 288	20	3.1 194287	10	AL672015	AL672015 Mouse DNA	345	20	3.1 262050	1	AP000985	AP000985 Rattus no
c 289	20	3.1 195607	2	AC117567	AC117567 Mus muscu	c 346	20	3.1 264902	2	AC126667	AC126667 Rattus no
c 290	20	3.1 195906	2	AC136746	AC136746 Mus muscu	c 347	20	3.1 266344	9	AC005158	AC005158 Homo sapi
c 291	20	3.1 196243	2	AC127471	AC127471 Sus scrof	c 348	20	3.1 267183	2	AC127078	AC127078 Rattus no
c 292	20	3.1 196315	2	AC118093	AC118093 Rattus no	349	20	3.1 268074	2	AC126599	AC126599 Rattus no
c 293	20	3.1 196640	2	AC026009	AC026009 Homo sapi	350	20	3.1 271932	2	AC097673	AC097673 Rattus no
c 294	20	3.1 197181	2	BK547937	BK547937 Dantlo rer	351	20	3.1 274015	2	AC127795	AC127795 Rattus no
c 295	20	3.1 197206	2	AC023757	AC023757 Homo sapi	352	20	3.1 274855	2	BK511168	BK511168 Dantlo rer
c 296	20	3.1 197295	9	AC073585	AC073585 Homo sapi	353	20	3.1 279110	1	RPX003	RPX003 Rattus no
c 297	20	3.1 197646	2	AC011041	AC011041 Homo sapi	354	20	3.1 281743	2	AC113873	AC113873 Rattus no
c 298	20	3.1 199294	10	AL589652	AL589652 Mouse DNA	c 355	20	3.1 290433	1	AE017034	AE017034 Rattus no
c 299	20	3.1 199510	2	AC103122	AC103122 Rattus no	356	20	3.1 294307	2	AC093974	AC093974 Rattus no
c 300	20	3.1 199724	10	AL808111	AL808111 Mouse DNA	357	20	3.1 296836	2	AC095624	AC095624 Rattus no
c 301	20	3.1 201437	2	AC013581	AC013581 Homo sapi	c 358	20	3.1 298836	2	AC095624	AC095624 Rattus no
c 302	20	3.1 203111	2	AP001647	AP001647 Homo sapi	359	20	3.1 300853	2	AC135145	AC135145 Rattus no
c 303	20	3.1 204552	2	PFMAL13P6	PFMAL13P6 Plasmodi	360	20	3.1 304674	3	AE003579	AE003579 Rattus no
c 304	20	3.1 205239	2	AC140177	AC140177 Homo sapi	361	20	3.1 308331	2	AC107110	AC107110 Rattus no
c 305	20	3.1 207117	2	AC146144	AC146144 Pan trogl	c 362	20	3.1 313096	2	AC131879	AC131879 Rattus no
c 306	20	3.1 207303	2	AL645562	AL645562 Homo sapi	363	20	3.1 324367	8	AE017091	AE017091 Oryza sat
c 307	20	3.1 211305	9	AC009975	AC009975 Homo sapi	c 364	20	3.1 332760	2	AC147293	AC147293 Rattus no
c 308	20	3.1 215966	2	AC046180	AC046180 Homo sapi	c 365	20	3.1 335799	2	BK005139	BK005139 Mus muscu
c 309	20	3.1 216422	2	AC096528	AC096528 Rattus no	c 366	20	3.1 340801	2	AC006751	AC006751 Camorhab
c 310	20	3.1 216972	9	AC067819	AC067819 Homo sapi	c 367	20	3.1 349980	6	AX344550	AX344550 Sequence
c 311	20	3.1 217332	2	BK572077	BK572077 Dantlo rer	c 368	19	2.9 390	6	YSKRELA	YSKRELA Candida alb
c 312	20	3.1 218160	1	STYPRKCH1	STYPRKCH1 Salmonell	369	19	2.9 393	3	AY297308	AY297308 Jolles sp
c 313	20	3.1 220665	2	AC123017	AC123017 Rattus no	370	19	2.9 414	3	AF328032	AF328032 Rattus no
c 314	20	3.1 222002	2	AC130398	AC130398 Rattus no	c 371	19	2.9 468	4	BTHAUC39	BTHAUC39 Sequence
c 315	20	3.1 223102	2	AC094457	AC094457 Rattus no	c 372	19	2.9 471	6	AX510116	AX510116 Sequence
c 316	20	3.1 223728	2	AC097906	AC097906 Rattus no	c 373	19	2.9 507	6	AR414869	AR414869 Sequence
c 317	20	3.1 224098	2	AC111386	AC111386 Rattus no	c 374	19	2.9 507	6	BD110422	BD110422 EST and e
c 318	20	3.1 226793	3	AE003753	AE003753 Drosophill	375	19	2.9 530	11	G97907	G97907 s208p6003FC



376	19	2.9	622	12	AY199254	At199254 Arabidops	c 433	19	2.9	19787	6	AX346353	AX346353 Sequence
377	19	2.9	629	5	AY206472	AY206472 Rana cete	c 434	19	2.9	24592	2	ACO13944	ACO13944 Drosophil
378	19	2.9	649	11	BV060604	BV060604 S212P6595	c 435	19	2.9	27223	3	AF068720	AF068720 Caenorhab
c 379	19	2.9	677	11	GV1055	GV1055 SHGC-79694	c 436	19	2.9	30804	9	AC134338	AC134338 Homo sapi
c 380	19	2.9	689	11	G61339	G61339 SHGC-85495	c 437	19	2.9	31883	3	U80455	U80455 Caenorhabd1
381	19	2.9	753	6	AX185792	AX185792 Sequence	c 438	19	2.9	32310	3	CER34D10	CER34D10
c 382	19	2.9	850	8	AJ590798	AJ590798 Arabidops	c 439	19	2.9	34335	9	AC112711	AC112711 Homo sapi
c 383	19	2.9	988	14	HBVPV2A	HBVPV2A Rice hoja b	c 440	19	2.9	36729	2	ACO14489	ACO14489 Drosophil
c 384	19	2.9	1197	1	AF188102	AF188102 Lactococc	c 441	19	2.9	37034	2	ACO66581	ACO66581 Homo sapi
c 385	19	2.9	1295	5	AF176818	AF176818 Silurana	c 442	19	2.9	37071	2	AC141537	AC141537 Rattus no
c 386	19	2.9	1416	3	AK115479	AK115479 Clona Int	c 443	19	2.9	37140	9	AY177663	AY177663 Homo sapi
c 387	19	2.9	1526	8	AY084425	AY084425 Arabidops	c 444	19	2.9	38482	3	U82736	U82736 Caenorhabd1
c 388	19	2.9	1530	8	AF324664	AF324664 Arabidops	c 445	19	2.9	38980	3	CER06C1	U87736 Caenorhabd1
c 389	19	2.9	1550	8	AF327427	AF327427 Arabidops	c 446	19	2.9	39065	2	ACO68331	ACO68331 Homo sapi
c 390	19	2.9	1799	8	ATHG3P	ATHG3P Arabidops	c 447	19	2.9	39282	9	ACO05596	ACO05596 Homo sapi
c 391	19	2.9	1833	8	U43593	U43593 Arabidops	c 448	19	2.9	39491	10	ACO04101	ACO04101 Mouse Cos
c 392	19	2.9	2004	6	AX461330	AX461330 Sequence	c 449	19	2.9	40016	9	ACO03038	ACO03038 Human DNA
c 393	19	2.9	2324	5	XELMRP1B	M34895 X. laevis ne	c 450	19	2.9	40630	10	ACO055240	ACO055240 Mus muscu
394	19	2.9	2677	8	AF383151	AF383151 Manihot e	c 451	19	2.9	42613	3	AF106575	AF106575 Caenorhab
c 395	19	2.9	2807	3	AF313771	AF313771 Drosophil	c 452	19	2.9	44430	8	ACO21046	ACO21046 Arabidops
c 396	19	2.9	2877	3	SCZPS2AA	M63342 S. pallida o	c 453	19	2.9	46422	8	OSJN00249	AL731606 Oryza sat
c 397	19	2.9	2978	3	SCZPS18AA	M63342 S. pallida o	c 454	19	2.9	49197	8	AP006349	AP006349 Lotus cor
c 398	19	2.9	3113	8	ATU43322	U43322 Arabidops	c 455	19	2.9	50440	2	AC140105	AC140105 Medicago
c 399	19	2.9	3620	14	HBVPV2R	L54073 Rice hoja b	c 456	19	2.9	50879	8	OSJN00293	BX548155 Oryza sat
400	19	2.9	4444	8	DCINUC1	X78423 D. carota (Q	c 457	19	2.9	51305	9	AL691465	AL691465 Homo sapi
c 401	19	2.9	4598	14	ACU04051	U04051 Autographa	c 458	19	2.9	52007	2	ACO80151	ACO80151 Homo sapi
c 402	19	2.9	4962	8	AF180896	AF180896 Arabidops	c 459	19	2.9	52478	10	AL6721172	AL6721172 Mouse DNA
c 403	19	2.9	5032	6	AX251778	AX251778 Sequence	c 460	19	2.9	58473	9	AL449103	AL449103 Human DNA
c 404	19	2.9	5171	3	AF449198	AF449198 Plasmodu	c 461	19	2.9	59865	2	AC133641	AC133641 Homo sapi
c 405	19	2.9	5219	4	BOVMEFA	M95684 Bos taurus	c 462	19	2.9	59865	2	AC133641	AC133641 Homo sapi
c 406	19	2.9	6061	6	AX345043	AX345043 Sequence	c 463	19	2.9	59918	2	AC133641	AC133641 Homo sapi
c 407	19	2.9	6179	6	AX251097	AX251097 Sequence	c 464	19	2.9	60747	9	AL355487	AL355487 Homo sapi
c 408	19	2.9	6179	6	AX344246	AX344246 Sequence	c 465	19	2.9	61615	9	ACO68779	ACO68779 Homo sapi
c 409	19	2.9	6391	6	AX323524	AX323524 Sequence	c 466	19	2.9	64071	2	ACO84122	ACO84122 Homo sapi
c 410	19	2.9	6665	6	AX277840	AX277840 Sequence	c 467	19	2.9	65784	5	BX511238	BX511238 Zebrafish
c 411	19	2.9	6665	6	AX323515	AX323515 Sequence	c 468	19	2.9	67799	2	AC135338	AC135338 Homo sapi
c 412	19	2.9	6665	6	AX344984	AX344984 Sequence	c 469	19	2.9	67970	3	PFMA11P3	AL031746 Plasmodu
c 413	19	2.9	6802	6	AX346132	AX346132 Sequence	c 470	19	2.9	70562	2	AC120033	AC120033 Homo sapi
414	19	2.9	8323	6	AX344961	AX344961 Sequence	c 471	19	2.9	71571	10	BX530028	BX530028 Mouse DNA
415	19	2.9	8334	14	LMPDDR	L34213 Fish lympho	c 472	19	2.9	72383	8	ATK0615985	ATK0615985
c 416	19	2.9	8530	3	TET491316	AJ491316 Tetrahyme	c 473	19	2.9	72902	8	AC101173	AC101173 Mus muscu
417	19	2.9	8597	1	AE010641	AE010641 Fusobacte	c 474	19	2.9	73007	9	AC004447	AC004447
418	19	2.9	9879	8	AF126285	AF126285 Pleurotus	c 475	19	2.9	73260	5	AL606809	AL606809 Homo sapi
419	19	2.9	10599	1	AE007589	AE007589 Clostridi	c 476	19	2.9	73491	9	AY246560	AY246560 Homo sapi
420	19	2.9	11046	1	U32764	U32764 Haemophilus	c 477	19	2.9	76396	2	ACO12995	ACO12995 Drosophil
c 421	19	2.9	11363	1	AF335469	AF335469 Escherich	c 478	19	2.9	76763	9	AL157705	AL157705 Human DNA
422	19	2.9	11496	1	AE006137	AE006137 Pasteurel	c 479	19	2.9	80601	9	AL1591472	AL1591472 Homo sapi
c 423	19	2.9	12132	1	AE000595	AE000595 Helicobac	c 480	19	2.9	80666	2	AC139531	AC139531 Homo sapi
c 424	19	2.9	12426	6	AX251236	AX251236 Sequence	c 481	19	2.9	81057	9	AC080125	AC080125 Homo sapi
c 425	19	2.9	13376	6	AX345485	AX345485 Sequence	c 482	19	2.9	82952	3	AC080125	AC080125 Homo sapi
c 426	19	2.9	14887	6	AX345533	AX345533 Sequence	c 483	19	2.9	86597	2	AC108364	AC108364 Pan trogl
c 427	19	2.9	15267	3	AY191994	AY191994 Fugu rubr	c 484	19	2.9	87538	9	AC158200	AL158200 Human DNA
428	19	2.9	15511	5	FRU131394	FRU131394 Sequence	c 485	19	2.9	89261	9	ACO98863	ACO98863 Homo sapi
429	19	2.9	17294	6	AX345888	AX345888 Sequence	c 486	19	2.9	89479	8	ACO06932	ACO06932 Genomic s
430	19	2.9	17934	6	AX346621	AX346621 Sequence	c 487	19	2.9	91203	8	ACO96731	ACO96731 Homo sapi
c 431	19	2.9	18617	6	AX281383	AX281383 Sequence	c 488	19	2.9	94399	8	AC111015	AC111015 Oryza sat
c 432	19	2.9	18617	6	AX346593	AX346593 Sequence	c 489	19	2.9	94399	8	AC111015	AC111015 Oryza sat

c 490	19	2.9	95173	8	AC068324	AC068324 Arabidops
491	19	2.9	96180	9	AC005868	AC005868 Homo sapi
492	19	2.9	96618	9	HS34781	AL035670 Human DNA
493	19	2.9	98210	2	AC102834	AC102834 Mus muscu
494	19	2.9	98917	2	AC116753	AC116753 Mus muscu
495	19	2.9	101500	9	AL365505	AL365505 Human DNA
496	19	2.9	102488	9	AP005231	AP005231 Homo sapi
497	19	2.9	103041	9	AC093384	AC093384 Homo sapi
498	19	2.9	103563	9	AC006979	AC006979 Homo sapi
499	19	2.9	103577	9	AC009449	AC009449 Homo sapi
500	19	2.9	103942	2	AC091859	AC091859 Homo sapi
501	19	2.9	103966	8	AC125473	AC125473 Medicago
c 502	19	2.9	105582	2	AC139065	AC139065 Homo sapi
c 503	19	2.9	106034	9	AC134028	AC134028 Homo sapi
c 504	19	2.9	106346	9	AC004045	AC004045 Homo sapi
c 505	19	2.9	107214	8	AC004318	AC004318 Arabidops
c 506	19	2.9	107977	2	AC136681	AC136681 Homo sapi
507	19	2.9	108916	9	AC010450	AC010450 Homo sapi
c 508	19	2.9	109359	9	AC004857	AC004857 Homo sapi
509	19	2.9	110000	2	AC107252_3	Continuation (4 of
510	19	2.9	110000	2	AC110642_2	Continuation (3 of
511	19	2.9	110000	2	AC119727_2	Continuation (3 of
c 512	19	2.9	110000	2	AL137126_0	AL137126 Homo sapi
c 513	19	2.9	110000	2	AL672265_0	AL672265 Homo sapi
c 514	19	2.9	110000	2	BX323883_0	BX323883 Danto rer
c 515	19	2.9	110000	2	BK470178_0	BK470178 Danto rer
516	19	2.9	110000	2	PFMAL13_07	Continuation (8 of
517	19	2.9	110000	2	PFMAL13_07	Continuation (8 of
518	19	2.9	110000	2	PFMAL13_08	Continuation (9 of
519	19	2.9	110000	2	PFMAL13_08	Continuation (9 of
c 520	19	2.9	110000	3	AC116505_0	AC116505 Dictyoste
c 521	19	2.9	110000	3	AC116557_1	AC116557 Dictyoste
c 522	19	2.9	110000	3	AC116584_4	Continuation (2 of
523	19	2.9	110000	6	AR274513_08	Continuation (5 of
524	19	2.9	110000	6	AR409405_1	Continuation (9 of
525	19	2.9	110000	6	BD061520_1	Continuation (2 of
526	19	2.9	110000	10	AE008681_0	AE008681 Mus muscu
527	19	2.9	110000	10	AE008681_0	AE008681 Mus muscu
528	19	2.9	110074	2	AC147364	AC147364 Medicago
529	19	2.9	110352	8	AC006220	AC006220 Arabidops
c 530	19	2.9	111117	2	AL358932	AL358932 Homo sapi
531	19	2.9	111201	9	AC108217	AC108217 Homo sapi
c 532	19	2.9	111535	10	AL928867	AL928867 Mouse DNA
533	19	2.9	111809	9	AC072041	AC072041 Homo sapi
534	19	2.9	112022	10	BK537149	BK537149 Mouse DNA
c 535	19	2.9	112316	9	AC080079	AC080079 Homo sapi
c 536	19	2.9	112685	2	AC016592	AC016592 Homo sapi
c 537	19	2.9	113199	9	AC126014	AC126014 Medicago
538	19	2.9	113656	9	AC112253	AC112253 Homo sapi
539	19	2.9	113840	9	AC117421	AC117421 Homo sapi
540	19	2.9	113880	3	PFMAL1P4	AL008670 Plasmiditu
541	19	2.9	114626	4	AC138157	AC138157 Carollia
542	19	2.9	117289	2	AL512309	AL512309 Homo sapi
c 543	19	2.9	118591	2	AC020202	AC020202 Drosophila
c 544	19	2.9	119696	2	AP005563	AP005563 Oryza sat
c 545	19	2.9	119701	5	BK247898	BK247898 Zebrafish
546	19	2.9	120368	9	AF257498	AF257498 Homo sapi
c 547	19	2.9	120952	9	AC005053	AC005053 Homo sapi
c 548	19	2.9	121068	9	AC015876	AC015876 Homo sapi
549	19	2.9	121372	2	AC145851	AC145851 Dasyatis n
550	19	2.9	121763	2	AC147012	AC147012 Medicago
c 551	19	2.9	121766	2	AC016019	AC016019 Drosophila
c 552	19	2.9	121959	9	AF536523	AF536523 Homo sapi
c 553	19	2.9	124359	9	AL157936	AL157936 Human DNA
c 554	19	2.9	125047	2	AC146988	AC146988 Lytechinu
c 555	19	2.9	125419	9	HS1658114	AL109845 Human DNA
556	19	2.9	125429	9	AC084291	AC084291 Homo sapi
c 557	19	2.9	126634	2	AC147173	AC147173 Apis mell
558	19	2.9	126919	2	AC146630	AC146630 Medicago
c 559	19	2.9	126919	2	AC074131	AC074131 Homo sapi
560	19	2.9	126342	2	AC010224	AC010224 Homo sapi
c 561	19	2.9	126386	8	AC005169	AC005169 Arabidops
c 562	19	2.9	127718	9	BS000059	BS000059 Pan trogl
c 563	19	2.9	128465	2	AC138569	AC138569 Gallus ga
564	19	2.9	128710	9	HS111920	AL078588 Human DNA
c 565	19	2.9	128907	9	AC105443	AC105443 Homo sapi
566	19	2.9	129949	2	AC022940	AC022940 Homo sapi
c 567	19	2.9	131005	5	AL929282	AL929282 Zebrafish
c 568	19	2.9	131250	8	AC128645	AC128645 Oryza sat
569	19	2.9	131274	9	AC069506	AC069506 Homo sapi
570	19	2.9	131278	2	AC108753	AC108753 Oryza sat
c 571	19	2.9	131526	14	AT145471	AT145471 Rachiplus
572	19	2.9	132010	2	AC024351	AC024351 Homo sapi
c 573	19	2.9	132604	6	AC060226	AC060226 Homo sapi
c 574	19	2.9	133894	6	A48542	A48542 Sequence 1
c 575	19	2.9	133894	14	122858	122858 Autographa
c 576	19	2.9	134242	9	AL607128	AL607128 Human DNA
577	19	2.9	135014	8	AP003222	AP003222 Oryza sat
c 578	19	2.9	135146	2	AC087562	AC087562 Pan trogl
c 579	19	2.9	135310	2	AC146087	AC146087 Pan trogl
c 580	19	2.9	135585	8	AC118134	AC118134 Oryza sat
c 581	19	2.9	135599	8	CFU30821	CFU30821 Cyenophora
c 582	19	2.9	136175	8	AP004656	AP004656 Oryza sat
c 583	19	2.9	138729	10	AC136023	AC136023 Mus muscu
c 584	19	2.9	140244	2	AC119962	AC119962 Mus muscu
c 585	19	2.9	140801	10	AC124701	AC124701 Mus muscu
c 586	19	2.9	141361	2	AC136524	AC136524 Oryza sat
587	19	2.9	141790	2	AL671759	AL671759 Mouse DNA
c 588	19	2.9	142125	2	AC129835	AC129835 Carls fam
c 589	19	2.9	143502	2	AC136825	AC136825 Oryza sat
c 590	19	2.9	143701	9	HS29C18	AC136825 Oryza sat
c 591	19	2.9	143756	9	AC136365	AC136365 Homo sapi
592	19	2.9	143834	9	AC004960	AC004960 Homo sapi
c 593	19	2.9	144060	2	AC132074	AC132074 Bos tauri
594	19	2.9	144362	8	AP005112	AP005112 Oryza sat
595	19	2.9	144898	2	AC135189	AC135189 Oryza sat
596	19	2.9	145285	2	AC102291	AC102291 Homo sapi
597	19	2.9	145309	2	AC073414	AC073414 Homo sapi
598	19	2.9	145424	9	AC010602	AC010602 Homo sapi
c 599	19	2.9	145614	2	AC006872	AC006872 Caenorhab
c 600	19	2.9	146655	8	AP003546	AP003546 Oryza sat
c 601	19	2.9	146000	9	AP005433	AP005433 Homo sapi
c 602	19	2.9	146039	5	AL627132	AL627132 Zebrafish
603	19	2.9	146244	2	AP002083	AP002083 Homo sapi

604	19	2.9	146568	5	BX470073	BX470073 Zebrafish	c 661	19	2.9	160432	5	AL929072	AL929072 Zebrafish
c 605	19	2.9	146712	5	AL935136	AL935136 Zebrafish	662	19	2.9	160580	9	AC116162	AC116162 Homo sapi
c 606	19	2.9	146806	2	AC142093	AC142093 Canis fam	663	19	2.9	160732	9	AC018647	AC018647 Homo sapi
c 607	19	2.9	146945	9	AC009464	AC009464 Homo sapi	664	19	2.9	160812	2	BX470210	BX470210 Danio rer
c 608	19	2.9	147208	5	BX470202	BX470202 Zebrafish	665	19	2.9	160877	2	AC026560	AC026560 Homo sapi
c 609	19	2.9	147460	2	AP003542	AP003542 Oryza sat	666	19	2.9	161230	8	AC079634	AC079634 Homo sapi
c 610	19	2.9	147686	10	AC124366	AC124366 Mus muscu	667	19	2.9	161366	10	AC122505	AC122505 Mus muscu
c 611	19	2.9	147920	2	BX649497	BX649497 Danio rer	668	19	2.9	161532	9	AC146202	AC146202 Pan trogl
c 612	19	2.9	148002	2	AL137638	AL137638 Homo sapi	c 669	19	2.9	161664	9	U82696	U82696 Homo sapien
c 613	19	2.9	148263	9	AC091988	AC091988 Homo sapi	c 670	19	2.9	161812	5	BX005045	BX005045 Zebrafish
c 614	19	2.9	148504	2	AC138732	AC138732 Pongo pyg	c 671	19	2.9	161946	9	AC094014	AC094014 Papio anu
c 615	19	2.9	148820	2	AC128050	AC128050 Rattus no	c 672	19	2.9	162513	10	AC132145	AC132145 Mus muscu
c 616	19	2.9	148906	2	AP003629	AP003629 Oryza sat	673	19	2.9	162753	2	AC144197	AC144197 Macaca mu
c 617	19	2.9	149560	2	BX235929	BX235929 Danio rer	674	19	2.9	162859	2	AC021369	AC021369 Homo sapi
c 618	19	2.9	150207	2	AL451067	AL451067 Homo sapi	c 675	19	2.9	163246	2	AC120248	AC120248 Rattus no
c 619	19	2.9	150879	2	AC134277	AC134277 Rattus no	c 676	19	2.9	163353	10	AL627076	AL627076 Mus muscu
c 620	19	2.9	150922	8	AP004568	AP004568 Oryza sat	c 677	19	2.9	163419	8	AP002908	AP002908 Homo sapi
c 621	19	2.9	151006	2	AC025893	AC025893 Homo sapi	c 678	19	2.9	163680	9	AL139821	AL139821 Homo sapi
c 622	19	2.9	151156	2	BX465183	BX465183 Danio rer	c 679	19	2.9	163747	9	AC146235	AC146235 Homo sapi
c 623	19	2.9	151248	2	BX511002	BX511002 Danio rer	c 680	19	2.9	163891	9	AC092647	AC092647 Homo sapi
c 624	19	2.9	151253	5	BX649371	BX649371 Zebrafish	c 681	19	2.9	164083	2	AC011034	AC011034 Homo sapi
c 625	19	2.9	151778	9	AC021311	AC021311 Homo sapi	c 682	19	2.9	164167	2	AC090104	AC090104 Homo sapi
c 626	19	2.9	151966	9	AC009901	AC009901 Homo sapi	c 683	19	2.9	164372	2	AL844602	AL844602 Mus muscu
c 627	19	2.9	152196	2	BX548040	BX548040 Danio rer	c 684	19	2.9	164519	9	AC020630	AC020630 Homo sapi
c 628	19	2.9	153438	2	AP005907	AP005907 Oryza sat	c 685	19	2.9	164739	2	BX682546	BX682546 Homo sapi
c 629	19	2.9	153829	2	AC141671	AC141671 Apis mell	c 686	19	2.9	164830	4	AC144690	AC144690 Homo sapi
c 630	19	2.9	153954	2	AC136602	AC136602 Bos tauru	c 687	19	2.9	165096	2	AC114223	AC114223 Rattus no
c 631	19	2.9	153926	2	AC107866	AC107866 Mus muscu	c 688	19	2.9	165387	2	AC138111	AC138111 Mus muscu
c 632	19	2.9	154174	5	AL935289	AL935289 Zebrafish	c 689	19	2.9	165973	9	AC097515	AC097515 Homo sapi
c 633	19	2.9	154180	8	AP000399	AP000399 Oryza sat	c 690	19	2.9	166192	9	AC096737	AC096737 Homo sapi
c 634	19	2.9	154338	10	AL669826	AL669826 Mouse DNA	c 691	19	2.9	166288	9	AL139410	AL139410 Human DNA
c 635	19	2.9	154685	9	AC007214	AC007214 Pan trogl	c 692	19	2.9	166324	5	BX005069	BX005069 Zebrafish
c 636	19	2.9	154711	2	AC027052	AC027052 Homo sapi	c 693	19	2.9	166538	9	AC078788	AC078788 Homo sapi
c 637	19	2.9	155196	10	AL669859	AL669859 Mouse DNA	c 694	19	2.9	166591	2	AC120180	AC120180 Mus muscu
c 638	19	2.9	155300	2	AL929459	AL929459 Danio rer	c 695	19	2.9	166885	9	HS30801	HS30801 Homo sapi
c 639	19	2.9	155401	9	AC007551	AC007551 Rattus no	c 696	19	2.9	167015	2	AC098691	AC098691 Homo sapi
c 640	19	2.9	155871	2	AC145252	AC145252 Rattus no	c 697	19	2.9	167405	8	AP002483	AP002483 Homo sapi
c 641	19	2.9	155973	2	AC125194	AC125194 Mus muscu	c 698	19	2.9	167427	8	AC139174	AC139174 Oryza sat
c 642	19	2.9	156372	9	AC104108	AC104108 Homo sapi	c 699	19	2.9	167570	9	AC093688	AC093688 Homo sapi
c 643	19	2.9	156733	9	AC069411	AC069411 Homo sapi	c 700	19	2.9	167682	2	AC136154	AC136154 Rattus no
c 644	19	2.9	157023	2	AC013625	AC013625 Homo sapi	c 701	19	2.9	168174	2	AC13154	AC13154 Bos tauru
c 645	19	2.9	157135	9	AL354807	AL354807 Human DNA	c 702	19	2.9	168497	2	AC092410	AC092410 Homo sapi
c 646	19	2.9	157274	2	AP004679	AP004679 Oryza sat	c 703	19	2.9	168963	2	AC009705	AC009705 Homo sapi
c 647	19	2.9	157883	5	BX571851	BX571851 Zebrafish	c 704	19	2.9	169048	2	AC018393	AC018393 Homo sapi
c 648	19	2.9	157991	2	BX323068	BX323068 Danio rer	c 705	19	2.9	169663	9	AC146232	AC146232 Pan trogl
c 649	19	2.9	158143	9	AL157384	AL157384 Human DNA	c 706	19	2.9	169761	2	AP003572	AP003572 Oryza sat
c 650	19	2.9	158591	9	AC012597	AC012597 Homo sapi	c 707	19	2.9	170078	9	AC015914	AC015914 Homo sapi
c 651	19	2.9	158617	9	AC135972	AC135972 Homo sapi	c 708	19	2.9	170141	2	AC015479	AC015479 Homo sapi
c 652	19	2.9	158709	2	AC083827	AC083827 Homo sapi	c 709	19	2.9	170236	9	AC147052	AC147052 Pan trogl
c 653	19	2.9	158898	2	AL359879	AL359879 Homo sapi	c 710	19	2.9	170301	2	AC016462	AC016462 Homo sapi
c 654	19	2.9	159217	9	AC016950	AC016950 Homo sapi	c 711	19	2.9	170361	10	AC110354	AC110354 Mus muscu
c 655	19	2.9	159309	2	BX511190	BX511190 Danio rer	c 712	19	2.9	170803	9	HS334420	HS334420 Human DNA
c 656	19	2.9	159409	2	AC092900	AC092900 Homo sapi	c 713	19	2.9	171066	2	AC092987	AC092987 Homo sapi
c 657	19	2.9	159501	9	AC108117	AC108117 Homo sapi	c 714	19	2.9	170803	9	HS334420	HS334420 Human DNA
c 658	19	2.9	159906	2	AC144625	AC144625 Mus muscu	c 715	19	2.9	170803	9	HS334420	HS334420 Human DNA
c 659	19	2.9	159919	9	BS000060	BS000060 Pan trogl	c 716	19	2.9	170803	9	HS334420	HS334420 Human DNA
c 660	19	2.9	160069	2	AC145325	AC145325 Papio ham	c 717	19	2.9	170803	9	HS334420	HS334420 Human DNA

c 718	19	2.9	171580	2	AC119887	AC119887 Mus muscu	c 775	19	2.9	180759	2	AC102274	AC102274 Mus muscu
c 719	19	2.9	171924	2	AC101861	AC101861 Mus muscu	c 776	19	2.9	180816	2	AC113230	AC113230 Sus scrofa
c 720	19	2.9	171963	2	BX2535960	BX2535960 Dantio rer	c 777	19	2.9	181085	2	AC114419	AC114419 Mus muscu
c 721	19	2.9	172003	8	AP002910	AP002910 Oryza sat	c 778	19	2.9	181250	2	BX571794	BX571794 Dantio rer
c 722	19	2.9	172043	9	AC026797	AC026797 Homo sapi	c 779	19	2.9	181308	9	AL353148	AL353148 Human DNA
c 723	19	2.9	172557	2	AC018944	AC018944 Homo sapi	c 780	19	2.9	181899	2	AC015904	AC015904 Homo sapi
c 724	19	2.9	172808	2	AC146379	AC146379 Pan trogl	c 781	19	2.9	181904	2	AC027623	AC027623 Homo sapi
c 725	19	2.9	172918	5	BX323457	BX323457 Zebrafish	c 782	19	2.9	181928	9	AC099674	AC099674 Homo sapi
c 726	19	2.9	173192	5	AL929030	AL929030 Zebrafish	c 783	19	2.9	181964	2	AC129023	AC129023 Mus muscu
c 727	19	2.9	173256	2	BX005207	BX005207 Dantio rer	c 784	19	2.9	182105	2	AC036149	AC036149 Homo sapi
c 728	19	2.9	173398	2	AC092972	AC092972 Homo sapi	c 785	19	2.9	182660	2	AC012416	AC012416 Homo sapi
c 729	19	2.9	173585	2	BX571679	BX571679 Dantio rer	c 786	19	2.9	182810	10	BX284626	BX284626 Homo sapi
c 730	19	2.9	173962	9	AF274856	AF274856 Homo sapi	c 787	19	2.9	183001	2	AC114227	AC114227 Rattus no
c 731	19	2.9	174074	2	BX842671	BX842671 Mus muscu	c 788	19	2.9	183066	9	AC114227	AC114227 Homo sapi
c 732	19	2.9	174383	9	AL929216	AL929216 Zebrafish	c 789	19	2.9	183093	9	AC138688	AC138688 Homo sapi
c 733	19	2.9	174399	9	AC104576	AC104576 Homo sapi	c 790	19	2.9	183105	3	AC104606	AC104606 Drosophila
c 734	19	2.9	174423	2	AC141189	AC141189 Rattus no	c 791	19	2.9	183168	9	AC092181	AC092181 Homo sapi
c 735	19	2.9	174632	2	BX897657	BX897657 Dantio rer	c 792	19	2.9	183196	2	AC083924	AC083924 Homo sapi
c 736	19	2.9	174654	9	AC073167	AC073167 Homo sapi	c 793	19	2.9	183508	2	AC131086	AC131086 Mus muscu
c 737	19	2.9	174725	5	AL954317	AL954317 Zebrafish	c 794	19	2.9	183544	10	AC102132	AC102132 Mus muscu
c 738	19	2.9	174893	3	AC104608	AC104608 Drosophila	c 795	19	2.9	183696	9	AC008172	AC008172 Homo sapi
c 739	19	2.9	175028	9	AC066692	AC066692 Homo sapi	c 796	19	2.9	183925	2	AC078870	AC078870 Homo sapi
c 740	19	2.9	175306	9	AC079948	AC079948 Homo sapi	c 797	19	2.9	183982	2	AC009825	AC009825 Homo sapi
c 741	19	2.9	175382	9	AL157836	AL157836 Human DNA	c 798	19	2.9	184137	9	AP005625	AP005625 Homo sapi
c 742	19	2.9	175549	10	AC128244	AC128244 Mus muscu	c 799	19	2.9	184155	10	AC124460	AC124460 Mus muscu
c 743	19	2.9	175775	9	AC112197	AC112197 Homo sapi	c 800	19	2.9	184214	9	AC145782	AC145782 Homo sapi
c 744	19	2.9	175825	9	HS10618	Z97195 Human DNA s	c 801	19	2.9	184351	2	AC079783	AC079783 Homo sapi
c 745	19	2.9	175880	10	BX001068	BX001068 Mouse DNA	c 802	19	2.9	184736	10	AC121767	AC121767 Mus muscu
c 746	19	2.9	176268	9	B5000082	B5000082 Pan trogl	c 803	19	2.9	184870	9	AC117386	AC117386 Homo sapi
c 747	19	2.9	176318	2	AC146186	AC146186 Pan trogl	c 804	19	2.9	184896	2	AC113228	AC113228 Sus scrofa
c 748	19	2.9	176329	2	AC117968	AC117968 Rattus no	c 805	19	2.9	185775	10	AC121967	AC121967 Homo sapi
c 749	19	2.9	176518	9	AC023933	AC023933 Homo sapi	c 806	19	2.9	185850	9	AL357394	AL357394 Human DNA
c 750	19	2.9	176539	10	AC127366	AC127366 Mus muscu	c 807	19	2.9	185930	9	AC023051	AC023051 Homo sapi
c 751	19	2.9	176668	2	AC027096	AC027096 Homo sapi	c 808	19	2.9	186072	2	AC022372	AC022372 Homo sapi
c 752	19	2.9	176787	2	AC021374	AC021374 Homo sapi	c 809	19	2.9	186078	9	AC090985	AC090985 Homo sapi
c 753	19	2.9	176947	9	HS170A21	Z82189 Human DNA s	c 810	19	2.9	186110	2	AC102204	AC102204 Mus muscu
c 754	19	2.9	176995	2	BX323050	BX323050 Dantio rer	c 811	19	2.9	186167	2	AC145618	AC145618 Homo sapi
c 755	19	2.9	177041	2	AC026344	AC026344 Homo sapi	c 812	19	2.9	186183	9	AC079857	AC079857 Homo sapi
c 756	19	2.9	177180	9	HS47384	Z83826 Human DNA s	c 813	19	2.9	186219	9	AC079857	AC079857 Homo sapi
c 757	19	2.9	177231	2	AC073259	AC073259 Homo sapi	c 814	19	2.9	186359	2	AC111041	AC111041 Homo sapi
c 758	19	2.9	177428	5	AL840641	AL840641 Zebrafish	c 815	19	2.9	186544	2	BX649638	BX649638 Dantio rer
c 759	19	2.9	177585	9	AC005826	AC005826 Homo sapi	c 816	19	2.9	186687	9	AC010744	AC010744 Homo sapi
c 760	19	2.9	177656	9	AL390783	AL390783 Human DNA	c 817	19	2.9	186693	2	AC013504	AC013504 Homo sapi
c 761	19	2.9	177728	2	AP001358	AP001358 Homo sapi	c 818	19	2.9	187316	9	AL139340	AL139340 Human DNA
c 762	19	2.9	177873	2	AC122486	AC122486 Mus muscu	c 819	19	2.9	187585	2	BX339348	BX339348 Homo sapi
c 763	19	2.9	177921	2	AC112343	AC112343 Rattus no	c 820	19	2.9	187778	2	AC055122	AC055122 Homo sapi
c 764	19	2.9	178610	5	BX324159	BX324159 Zebrafish	c 821	19	2.9	187804	10	AL669974	AL669974 Homo sapi
c 765	19	2.9	178660	9	AC009852	AC009852 Homo sapi	c 822	19	2.9	188104	2	AC094531	AC094531 Mus muscu
c 766	19	2.9	178664	2	BX511115	BX511115 Dantio rer	c 823	19	2.9	188515	2	AC102531	AC102531 Mus muscu
c 767	19	2.9	178804	2	AC016918	AC016918 Homo sapi	c 824	19	2.9	188527	9	AC084357	AC084357 Homo sapi
c 768	19	2.9	179098	9	AC092650	AC092650 Homo sapi	c 825	19	2.9	188527	9	AC084357	AC084357 Homo sapi
c 769	19	2.9	179194	2	AC146925	AC146925 Homo sapi	c 826	19	2.9	188527	9	AC084357	AC084357 Homo sapi
c 770	19	2.9	179461	2	AC019177	AC019177 Homo sapi	c 827	19	2.9	188527	9	AC084357	AC084357 Homo sapi
c 771	19	2.9	180035	2	AC125819	AC125819 Rattus no	c 828	19	2.9	188527	9	AC084357	AC084357 Homo sapi
c 772	19	2.9	180140	2	AC145521	AC145521 Homo sapi	c 829	19	2.9	188527	9	AC084357	AC084357 Homo sapi
c 773	19	2.9	180347	9	AC009415	AC009415 Homo sapi	c 830	19	2.9	188527	9	AC084357	AC084357 Homo sapi
c 774	19	2.9	180401	9	AC007489	AC007489 Homo sapi	c 831	19	2.9	188527	9	AC084357	AC084357 Homo sapi

832	19	2.9	188754	2	BX005169	BX005169 Dantio rer	889	19	2.9	203715	2	AC019807	AC019807 Homo sapi
833	19	2.9	188787	2	AC090215	AC090215 Homo sapi	890	19	2.9	203841	2	AC141954	AC141954 Rattus no
834	19	2.9	188903	2	AC143524	AC143524 Papilio ham	891	19	2.9	204125	2	BX005025	BX005025 Dantio rer
835	19	2.9	188914	4	AC019118	AC019118 Homo sapi	892	19	2.9	204158	2	AC012719	AC012719 Rattus no
836	19	2.9	189018	9	AC091185	AC091185 Homo sapi	893	19	2.9	204662	9	CNS01RHO	AL162191 Human chr
837	19	2.9	189036	2	AC019142	AC019142 Homo sapi	894	19	2.9	205825	9	AC146011	AC146011 Pan trogl
838	19	2.9	189062	2	AP001106	AP001106 Homo sapi	895	19	2.9	206093	2	BX571844	BX571844 Dantio rer
839	19	2.9	189559	9	AC099845	AC099845 Homo sapi	896	19	2.9	206222	2	AC108891	AC108891 Bos tauru
840	19	2.9	189758	2	AC115807	AC115807 Mus muscu	897	19	2.9	206358	2	AC142250	AC142250 Mus muscu
841	19	2.9	189819	2	AP002475	AP002475 Homo sapi	898	19	2.9	206362	2	AC141488	AC141488 Rattus no
842	19	2.9	189876	2	AC084810	AC084810 Homo sapi	899	19	2.9	207124	2	AC119648	AC119648 Rattus no
843	19	2.9	189893	2	AC013254	AC013254 Drosophi1	900	19	2.9	207582	2	AC144674	AC144674 Rattus no
844	19	2.9	190012	2	BX629351	BX629351 Dantio rer	901	19	2.9	207840	5	BX005008	BX005008 Zebrafish
845	19	2.9	190015	9	AC087639	AC087639 Homo sapi	902	19	2.9	207842	9	AC010276	AC010276 Homo sapi
846	19	2.9	190096	2	BX119962	BX119962 Dantio rer	903	19	2.9	209384	2	AC016618	AC016618 Homo sapi
847	19	2.9	190168	2	BX088561	BX088561 Dantio rer	904	19	2.9	210189	10	AC123074	AC123074 Mus muscu
848	19	2.9	190325	3	AC007904	AC007904 Drosophi1	905	19	2.9	210949	2	AC146885	AC146885 Gallitbri1
849	19	2.9	190801	3	AC009212	AC009212 Drosophi1	906	19	2.9	211331	5	BX511214	BX511214 Zebrafish
850	19	2.9	190961	9	AC007458	AC007458 Homo sapi	907	19	2.9	211571	5	BX248124	BX248124 Zebrafish
851	19	2.9	191017	2	AC034286	AC034286 Mus muscu	908	19	2.9	211934	10	AL777223	AL777223 Mouse DNA
852	19	2.9	191133	9	AC142213	AC142213 Pan trogl	909	19	2.9	212670	2	AC120420	AC120420 Mus muscu
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857	19	2.9	193600	5	AL929261	AL929261 Zebrafish	914	19	2.9	213934	2	BX293565	BX293565 Dantio rer
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859	19	2.9	194247	2	AC128060	AC128060 Rattus no	916	19	2.9	214643	2	AC136848	AC136848 Rattus no
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869	19	2.9	197828	2	AC034169	AC034169 Homo sapi	926	19	2.9	218347	2	AC126889	AC126889 Rattus no
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958	19	2.9	228080	2	BX30097	BX30097 Danto fer
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993	19	2.9	239803	2	AC113785	AC113785 Rattus no
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997	19	2.9	242827	2	AC115266	AC115266 Rattus no
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# ALIGNMENTS

RESULT 1					BD245276				
LOCUS					BD245276				
DEFINITION					Development of novel antibiotics based on bacteriophage genomics.				
ACCESSION					BD245276				
VERSION					BD245276.1 GI:33055046				
KEYWORDS					JP 2002531107-A/11.				
SOURCE					unidentified				
ORGANISM					unclassified.				
REFERENCE					1 (bases 1 to 651)				
AUTHORS					Pelletier,J., Gros,P. and Dubow,M.				
TITLE					Development of novel antibiotics based on bacteriophage genomics				
JOURNAL					Patent: JP 2002531107-A 11 24-SEP-2002;				
COMMENT					PHAGEGEN INC				
					OS Staphylococcus aureus bacteriophage 77				
					PN JP 2002531107-A/11				
					PD 24-SEP-2002				
					PF 03-DEC-1999 JP 2000585456				
					PR 03-DEC-1998 US 60/110992,03-JUN-1999 US 09/226144 PR				
					28-SEP-1999 US 09/407804,30-SEP-1999 US 60/157218 PR				
					01-DEC-1999 US 60/168777,02-DEC-1999 US 09/454252 PI JERRY				
					PELLETIER,PHILIPPE GROS,MICHAEL DUBOW				
					PC C12N15/09,A01N63/00,A61K38/00,A61K45/00,A61P31/04,C07K14/005,				
					PC C12N1/00,				
					PC C12N1/21,C12Q1/02,C12Q1/68,G01N3/15,G01N33/50,G01N33/566,PC				
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					PC A61K37/02				
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Best Local Similarity					100.0%; Pwd.No.2,3e-285;				
Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
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RESULT 2  
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 LOCUS Bacteriophage phi PVL proviral DNA, complete sequence.  
 DEFINITION AB009866  
 ACCESSION AB009866.2 GI:8051688  
 VERSION  
 KEYWORDS integrase; LukE-PV; LukS-PV; holin; amidase (peptidoglycan hydrolase); capsid protein; portal protein.  
 SOURCE  
 ORGANISM *Staphylococcus aureus* bacteriophage PVL  
 Viruses; dsDNA viruses, no RNA stage; Caudovirales; Siphoviridae.  
 REFERENCE  
 1 (sites)  
 AUTHORS Kaneko, J., Kimura, T., Kawakami, Y., Tomita, T. and Kamio, Y.  
 TITLE Pantom-valentine leukocidin genes in a phage-like particle isolated from mitecycin C-treated *Staphylococcus aureus* V8 (ATCC 49775)  
 JOURNAL Biochem. Biotechnol. 61 (11), 1960-1962 (1997)  
 MEDLINE 98067870  
 PUBMED 9404084  
 REFERENCE 2 (sites)  
 AUTHORS Kaneko, J., Kimura, T., Narita, S., Tomita, T. and Kamio, Y.

TITLE Complete nucleotide sequence and molecular characterization of the temperate staphylococcal bacteriophage phiPVL carrying Pantom-Valentine leukocidin genes  
 JOURNAL Gene 215 (1), 57-67 (1998)  
 MEDLINE 98332719  
 PUBMED 9666077  
 REFERENCE 3 (bases 1 to 41401)  
 AUTHORS Kaneko, J., Kimura, T., Narita, S., Tomita, T. and Kamio, Y.  
 TITLE Direct Submision  
 JOURNAL Biol. Chem., Faculty of Agriculture, 1-1 Tsutsumi-dori Aomiyamachi, Aoba-ku, Sendai, Miyagi 981, Japan (E-mail: jkaneko@biochem.tohoku.ac.jp, Tel: 81-22-717-8781, Fax: 81-22-717-8780)  
 COMMENT On May 24, 2000 this sequence version replaced gi:3341907.  
 Sequence updated (06-Feb-1998)  
 Sequence updated (22-May-2000).  
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DEFINITION	Development of novel antibiotics based on bacteriophage genomes.			
ACCESSION	BID245281			
VERSION	BID245281.1	GI:30055051		
KEYWORDS	JF 2002351107-A/16.			
SOURCE	unidentified			
ORGANISM	unclassified.			
REFERENCE	1 (bases 1 to 41708)			
AUTHORS	Pelletier,J., Gros,P. and Dubow,M.			
TITLE	Development of novel antibiotics based on bacteriophage genomes			
JOURNAL	Patent: JP 200231107-A 16 24-SEP-2002;			
COMMENT	PHAGETECH INC OS Staphylococcus aureus bacteriophage 77 PN JP 200231107-A/16 PD 24-SEP-2002 PF 03-DEC-1999 JP 2000585456 PR 03-DEC-1999 US 60/110992;03-JUN-1999 US 09/326144 PR R 28-SEP-1999 US 09/407804;30-SEP-1999 US 60/157218 PR SI DEC-1999 US 60/168777;02-DEC-1999 US 09/454252 PI JERRY PELLETIER, PHILIPPE GROS, MICHAEL DUBOW			
	PC C12N15/09,A01N63/00,A61K38/00,A61K45/00,A61P31/04,C07K14/005, PC C12H1/00, PC C12M1/21,C12Q1/02,C12Q1/68,G01N33/15,G01N33/50,G01N33/566, PC C12N15/00, PC A61K37/02 CC Genome Sequence FH Key Location/Qualifiers FT source 1..41708 FT /organism='Staphylococcus aureus bacteriophage 77'. FT .			
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RESULT 4  
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LOCUS  
DEFINITION Sequence 3 from patent US 637652.  
ACCESSION AR368770  
VERSION AR368770.1 GI:34603077  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 41708)  
AUTHORS Pelletier,D., Gros,P. and Dubow,M.  
TITLE Compositions and methods involving an essential *Staphylococcus aureus* gene and its encoded protein  
JOURNAL Patent: US 637652-A 3 23-APR-2002;  
FEATURES  
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Location/Qualifiers  
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ORIGIN

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Best Local Similarity 100.0%; Pred. No. 1.3e-285;  
Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 40451 TCGATTAAGAAAGATTTATTTAATTTAAACAAGAGATTTAAATGA 40501

RESULT 5  
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LOCUS  
DEFINITION *Staphylococcus aureus* subsp. *aureus* NM2 DNA, complete genome,  
strain:NM2, section 7/10.  
ACCESSION AP004828 BA000033  
VERSION AP004828.1 GI:21204850



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Db 249406 TCGATTAAGAAAGATTTATTTATTTATTTAAACAGAGAGATTTAAATGA 249356

RESULT 6

AC130112 236256 bp DNA linear HTG 13-MAY-2003

LOCUS Rattus norvegicus clone CH230-100B18, WORKING DRAFT SEQUENCE, 3

DEFINITION Rattus norvegicus clone CH230-100B18, WORKING DRAFT SEQUENCE, 3

ACCESSION AC130112

VERSION AC130112.3 GI:30579729

KEYWORDS HTG, HTGS, PHASE1, HTGS, DRAFT, HTGS, FULLTOP.

SOURCE Rattus norvegicus (Norway rat)

ORGANISM Rattus norvegicus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

1 (bases 1 to 236256)

REFERENCE

AUTHORS Muzny, D., Marle, Metzker, M., Lee, Abramson, S., Adams, C., Alder, J., Allen, C., Allen, H., Albrooks, S., Amin, A., Angilano, D., Anyaloboch, V., Aoyagi, A., Ayodeji, H., Baca, E., Baden, H., Baldwin, D., Bandarenko, D., Barber, M., Barnstead, M., Benedek, F., Bielawski, K., Blair, J., Blankenburg, K., Blyth, P., Brown, M., Bryant, N., Burch, K., Burch, P., Burrell, K., Calderon, E., Cardenas, V., Carter, K., Cavazos, I., Caesar, H., Cantler, A., Chavel, J., Chavez, D., Chen, G., Chen, R., Chen, Y., Chen, Z., Chu, J., Cleveland, C., Cockrell, R., Cox, C., Coyle, M., Cree, A., D'Souza, L., Davila, M., L., Davis, C., Davy-Carroll, L., De Andrade, C., Dedrich, D., Delgado, O., Denison, S., Deramo, C., Ding, Y., Dinh, H., DiVya, K., Drepper, H., Dugan-Rocha, S., Dunn, A., Durbin, K., Duval, B., Evans, K., Egan, A., Escotto, M., Eugene, C., Evans, C., A., Falls, T., Fan, G., Fernandez, S., Finley, M., Flagg, N., Forbes, L., Foster, M., Foster, P., Frazer, C., M., Gabi, A., Gante, R., Garcia, A., Garner, T., Garza, M.,

Georgiev, E., Geer, K., Gill, R., Grady, M., Guerra, W., Guevara, W., Gunaratne, P., Haaland, W., Hamill, C., Hamilton, C., Hamilton, K., Harvey, Y., Havlek, P., Hayes, A., Henderson, N., Hernandez, K., Hernandez, R., Rhine, S., Hladun, S. L., Hodgson, A., Hogues, M., Hollins, B., Howell, S., Hulys, S., Hume, J., Idlebird, D., Jackson, A., Jackson, L., Jacob, L., Jiang, H., Johnson, B., Johnson, R., Joliver, A., Karpathy, S., Kelly, S., Khan, Z., King, L., Kovar, C., Kowalski, C., Kraft, C. L., Lebow, H., Levan, J., Lewis, L., Li, Z., Liu, J., Liu, J., Liu, Y., Liu, Y., London, P., Longacre, S., Lopez, J., Lorenz, L., Louisa, H., Lozada, R. J., Lu, X., Ma, J., Maheshwari, M., Mahindaratne, M., Mahmood, M., Malloy, K., Mangum, A., Mangum, B., Mapua, P., Martin, K., Martin, R., Martinez, E., Mahoney, S., McLeod, M. P., McNeill, T. Z., Meenen, E., Milosavljevic, A., Miner, G., Mijic, E., Montemayor, J., Moore, S., Morgan, M., Morris, K., Morris, S., Muntaner, M., Murphy, K., Nair, L., Nankervis, C., Neal, D., Newton, N., Nguyen, N., Norris, S., Nwoko, O., Okunolu, G., Olumayegun, A., Pal, S., Parks, K., Pasternak, S., Paul, H., Perez, A., Perez, L., Pfannkuch, C., Plopper, F., Polinder, A., Popovic, D., Primus, E., Pu, L., Pu, L., Puzo, M., Qutob, J., Rachlin, E., Reeves, K., Regier, M. A., Relph, R., Rellly, B., Rellly, M., Ren, Y., Reuter, M., Richards, S., Riggs, F., Rives, C., Rodkey, T., Rojas, A., Rose, M., Rose, R., Ruiz, S. J., Sanders, W., Savary, G., Scherer, S., Scott, G., Shatsman, S., Shen, H., Shetty, J., Shvartsbeyn, A., Sison, I., Sitter, C. D., Smajda, D., Smedley, A., Sodergren, E., Song, X., Z., Sotelle, R., Sosa, J., Steinle, M., Strong, R., Sutton, A., Svatek, A., Taber, J., Taylor, C., Taylor, T., Thomas, N., Thomas, S., Tingey, A., Trejos, Z., Uman, K., Valas, R., Vera, V., Villaseca, D., Waldron, L., Walker, B., Wang, J., Wang, Q., Wang, S., Warren, J., Warren, R., Wei, X., White, F., Williams, G., Willson, R., Wlezyk, R., Woodson, H., Worley, K., Wright, D., Wright, R., Wu, J., Yakub, S., Yen, O., Yoon, L., Yoon, V., Yu, F., Zhang, J., Zhou, J., Zhou, X., Zhao, S., Dunn, D., von Niederhausern, A., Weiss, R., Smith, D. R., Holt, R. A., Smith, H. O., Weinstein, G., and Gibbs, R. A.

Direct Submission

Unpublished

2 (bases 1 to 236256)

Worley, K. C.

Direct Submission

Submitted (08-AUG-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

3 (bases 1 to 236256)

Rat Genome Sequencing Consortium.

Direct Submission

Submitted (13-MAY-2003) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA

On May 13, 2003 this sequence version replaced gi:22855970.

The sequence in this assembly is a combination of BAC based reads and whole genome shotgun sequencing reads assembled using Atlas (<http://www.hgsc.bcm.tmc.edu/projects/rat/>). Each contig described in the feature table below represents a scaffold in the Atlas assembly (a 'contig-scaffold'). Within each contig-scaffold, individual sequence contigs are ordered and oriented, and separated by sized gaps filled with Ns to the estimated size. The sequence may extend beyond the ends of the clone and there may be sequence

contigs within a contig-scaffold that consist entirely of whole genome shotgun sequence reads. Both end sequences and whole genome shotgun sequence only contigs will be indicated in the feature table.

Genome Center  
Center: Baylor College of Medicine

Center code: BCM

Web site: <http://www.hgsc.bcm.tmc.edu/>

Contact: [hgsc-help@bcm.tmc.edu](mailto:hgsc-help@bcm.tmc.edu)

Project Information

Center project name: CJFJ

Center clone name: CH230-100B18

Summary Statistics

Assembly program: Atlas 3.0j

Consensus quality: 224059 bases at least Q40

Consensus quality: 225273 bases at least Q30

Consensus quality: 226227 bases at least Q20

Estimated insert size: 233388; sum-of-contigs estimation

Quality coverage: 10x in Q20 bases; sum-of-contigs estimation

NOTE: Estimated insert size may differ from sequence length  
(see [http://www.hgsc.bcm.tmc.edu/docs/Genbank\\_draft\\_data.html](http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html)).  
NOTE: This is a 'working draft' sequence. It currently  
consists of 3 contigs. The true order of the pieces  
is not known and their order in this sequence record is  
arbitrary. Gaps between the contigs are represented as  
runs of N, but the exact sizes of the gaps are unknown.  
This record will be updated with the finished sequence  
as soon as it is available and the accession number will  
be preserved.

1 233677: contig of 233677 bp in length  
233678 233777: gap of unknown length  
233778 234933: contig of 1156 bp in length  
234934 235033: gap of unknown length  
235034 236256: contig of 1223 bp in length.

FEATURES

source

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ORIGIN

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Best Local Similarity 100.0%; Pred. No. 0.7;

Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 139 TATTAGATTGTTTAAAGGCTA 163

DB 225301 TATTAGATTGTTTAAAGGCTA 225325

Search completed: October 15, 2004, 03:29:20  
Job time : 3418.2 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OK nucleic - nucleic search, using sw model

Run on: October 14, 2004, 18:55:29 ; Search time 434.29 Seconds

(without alignments)  
6368.040 Million cell updates/sec

Title: US-09-407-804A-5

Perfect score: 651

Sequence: 1 atgaacgagcaataatagg.....acaagagagatuaatga 651

Scoring table: OLIGO NUC

Gapop 60.0 , Gapext 60.0

Searched: 3373863 seqs, 2124099041 residues

Word size : 0

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Listing first 1000 summaries

Database : N\_Geneseq\_29Jan04.\*

1: geneseqn180s.\*  
2: geneseqn190s.\*  
3: geneseqn200s.\*  
4: geneseqn201s.\*  
5: geneseqn2001s.\*  
6: geneseqn2002s.\*  
7: geneseqn2003s.\*  
8: geneseqn2003bs.\*  
9: geneseqn2003cs.\*  
10: geneseqn2004s.\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	651	100.0	651	3 AAA68249	Aa68249 Bacterioph
2	651	100.0	41708	3 AAA68247	Aa68247 Bacterioph
3	651	100.0	41708	4 AAC86106	Aac86106 Complete
4	23	3.5	305	3 AAC94532	Aac94532 Cat Flaa
5	22	3.4	4007	4 AAL06007	Aa106007 Human rep
6	22	3.4	4007	4 ABI98572	Ab198572 Human tes
7	22	3.4	13449	6 ABI33384	Ab133384 Human imm

c	8	21	3.2	438	3	AA56843	AA56843 Mycoplasma
c	9	21	3.2	33665	4	ABU08422	AbU08422 Drosophila
c	10	21	3.2	66743	4	ABL27118	AbL27118 Drosophila
c	11	20	3.1	98	2	AA25626	AA25626 Human gen
c	12	20	3.1	454	6	ABL69046	AbL69046 Kidney ca
c	13	20	3.1	492	3	AA56954	AA56954 Human col
c	14	20	3.1	492	6	ABT12376	AbT12376 Oocytes a
c	15	20	3.1	492	7	ACD91670	AcD91670 Human col
c	16	20	3.1	835	6	ABQ46604	AbQ46604 Oligonuc
c	17	20	3.1	835	6	ABQ46605	AbQ46605 Oligonuc
c	18	20	3.1	887	6	ABQ48892	AbQ48892 Oligonuc
c	19	20	3.1	887	6	ABQ48893	AbQ48893 Oligonuc
c	20	20	3.1	1008	7	ACA24386	AcA24386 Prokaryot
c	21	20	3.1	1206	6	ABQ21670	AbQ21670 Oligonuc
c	22	20	3.1	1206	6	ABQ21671	AbQ21671 Oligonuc
c	23	20	3.1	1232	6	ABQ17902	AbQ17902 Oligonuc
c	24	20	3.1	1232	6	ABQ17903	AbQ17903 Oligonuc
c	25	20	3.1	1323	7	ACA47835	AcA47835 Prokaryot
c	26	20	3.1	1505	2	AA599568	AA599568 Nucleic a
c	27	20	3.1	1594	6	ABT10839	AbT10839 Human bre
c	28	20	3.1	4836	4	ABU08818	AbU08818 Drosophila
c	29	20	3.1	5454	3	AA470189	AA470189 Plasmodu
c	30	20	3.1	6775	6	ABQ67159	AbQ67159 Human ang
c	31	20	3.1	10194	4	ABU08154	AbU08154 Drosophila
c	32	20	3.1	10855	6	ABU33489	AbU33489 Human imm
c	33	20	3.1	14335	4	AAE28824	AAE28824 Genomic f
c	34	20	3.1	14766	4	ABU05848	AbU05848 Drosophila
c	35	20	3.1	18585	6	ABU34608	AbU34608 Human met
c	36	19	2.9	190	4	ABK41908	AbK41908 cDNA enco
c	37	19	2.9	190	8	ADB59575	AD59575 Connectiv
c	38	19	2.9	303	4	ABK42649	AbK42649 Genomic a
c	39	19	2.9	303	8	ADB60805	AD60805 Connectiv
c	40	19	2.9	357	4	ABK08757	AbK08757 Human sec
c	41	19	2.9	362	5	ABV15180	AbV15180 Human pro
c	42	19	2.9	471	6	AB217006	Ab217006 Arabidops
c	43	19	2.9	532	3	AA53493	AA53493 Arabidops
c	44	19	2.9	753	4	AAH70213	AAH70213 Human cer
c	45	19	2.9	955	3	AA41535	AA41535 Arabidops
c	46	19	2.9	1015	6	ABQ43982	AbQ43982 Oligonuc
c	47	19	2.9	1015	6	ABQ43983	AbQ43983 Oligonuc
c	48	19	2.9	1526	3	AA36093	AA36093 Arabidops
c	49	19	2.9	1994	9	AD25032	AD25032 Plant gro
c	50	19	2.9	2903	4	ABU26074	AbU26074 Drosophila
c	51	19	2.9	3345	4	ABU14304	AbU14304 Drosophila
c	52	19	2.9	5032	6	AA561083	AA561083 Human gen
c	53	19	2.9	6061	4	AA532141	AA532141 Human imm
c	54	19	2.9	6179	4	AA546343	AA546343 Tumour su
c	55	19	2.9	6179	6	ABK31250	AbK31250 Signal tr
c	56	19	2.9	6391	6	ABK28138	AbK28138 DNA trans
c	57	19	2.9	6665	4	AA545298	AA545298 Chemocall
c	58	19	2.9	6665	6	ABU32082	AbU32082 Human imm
c	59	19	2.9	6665	6	ABK28129	AbK28129 DNA trans
c	60	19	2.9	6802	6	ABU33230	AbU33230 Human imm
c	61	19	2.9	8323	6	ABU332059	AbU332059 Human imm
c	62	19	2.9	12426	4	AA546682	AA546682 Tumour su
c	63	19	2.9	13376	6	ABU32583	AbU32583 Human imm
c	64	19	2.9	14987	6	ABU32631	AbU32631 Human imm
c	65	19	2.9	17294	6	ABU32986	AbU32986 Human imm
c	66	19	2.9	17934	6	ABU33719	AbU33719 Human imm
c	67	19	2.9	18817	6	ABU34494	AbU34494 Human met
c	68	19	2.9	18817	6	ABU70161	AbU70161 Chemocall
c	69	19	2.9	19787	6	ABU33451	AbU33451 Human imm
c	70	19	2.9	110000	2	AA142063	AA142063 Human imm
c	71	19	2.9	110000	6	ABK28787_1	AbK28787_1 Continuation (9 of
c	72	19	2.9	110000	8	ACH03408_1	ACH03408_1 Continuation (2 of
c	73	19	2.9	133894	2	AA113635	AA113635 AcNFV gen
c	74	19	2.9	269223	4	AAE28554	AAE28554 Genomic f
c	75	19	2.9	335913	5	AA161371	AA161371 Soybean 2
c	76	19	2.9	335913	5	AA161372	AA161372 Soybean 2
c	77	18	2.8	148	2	AAH87023	AAH87023 Human sin
c	78	18	2.8	229	2	AAH11511	AAH11511 Human bla
c	79	18	2.8	301	3	AAE61543	AAE61543 Human sin
c	80	18	2.8	301	3	AAE61543	AAE61543 Human sin
c	81	18	2.8	323	6	ABK91810	AbK91810 DNA enco
c	82	18	2.8	333	6	ABQ67409	AbQ67409 Listeria
c	83	18	2.8	355	3	AAE61544	AAE61544 Recombina
c	84	18	2.8	355	9	AD551549	AD551549 D EGF rec
c	85	18	2.8	376	6	ABK91824	AbK91824 DNA enco
c	86	18	2.8	379	4	AAE56124	AAE56124 Human imm
c	87	18	2.8	400	6	ABK97108	AbK97108 Gene #360
c	88	18	2.8	423	4	AAH53235	AAH53235 S. epider
c	89	18	2.8	444	8	ACH24147	ACH24147 Human adu
c	90	18	2.8	459	7	ABK42501	AbK42501 Bovine ES
c	91	18	2.8	474	4	AAH34212	AAH34212 Human col
c	92	18	2.8	483	6	ABN91604	AbN91604 Staphyloc
c	93	18	2.8	558	2	AAO92645	AAO92645 Recombina
c	94	18	2.8	593	5	AAH56560	AAH56560 Human pro
c	95	18	2.8	597	5	AAH56565	AAH56565 DNA enco
c	96	18	2.8	636	9	ADG90603	ADG90603 E. faeciu
c	97	18	2.8	720	7	ACF67518	ACF67518 Phototab
c	98	18	2.8	858	6	ABN96839	AbN96839 Arabidops
c	99	18	2.8	945	6	ABQ43506	AbQ43506 Oligonuc
c	100	18	2.8	945	6	ABQ43507	AbQ43507 Oligonuc
c	101	18	2.8	1077	3	AAE60070	AAE60070 Human sec
c	102	18	2.8	1107	6	ABN91609	AbN91609 Staphyloc
c	103	18	2.8	1122	6	ABN83917	AbN83917 Truncated
c	104	18	2.8	1141	6	ABQ34256	AbQ34256 Oligonuc
c	105	18	2.8	1141	6	ABQ34257	AbQ34257 Oligonuc
c	106	18	2.8	1148	6	ABN83916	AbN83916 Arabidops
c	107	18	2.8	1164	7	ACH27492	ACH27492 Truncated
c	108	18	2.8	1167	6	ABN91484	AbN91484 Staphyloc
c	109	18	2.8	1230	7	ACG72028	ACG72028 BCU0475 g
c	110	18	2.8	1809	6	AB215899	AB215899 Arabidops
c	111	18	2.8	1821	6	AAE29066	AAE29066 Phascolus
c	112	18	2.8	1832	6	ABN83929	AbN83929 Arabidops
c	113	18	2.8	2352	6	ABE32123	ABE32123 Canida a
c	114	18	2.8	3041	9	ADB68944	ADB68944 C. neofo
c	115	18	2.8	3076	4	AAH54938	AAH54938 S. epider
c	116	18	2.8	3165	9	ADB62426	ADB62426 Human cDN
c	117	18	2.8	3529	4	ABU330510	AbU330510 Drosophila
c	118	18	2.8	3555	4	AAH54844	AAH54844 S. epider
c	119	18	2.8	3578	4	ABU330502	AbU330502 Drosophila
c	120	18	2.8	3827	4	ABU24964	AbU24964 Drosophila
c	121	18	2.8	3863	4	ABU06242	AbU06242 Drosophila

122	18	2.8	4138	AAH54631	Abi54631 S. spider	179	18	2.8	13537	4	AAK68964	AAK68964 Human imm
123	18	2.8	4413	ABU04492	AbU04492 Drosophila	180	18	2.8	14551	6	ABJ34585	ABJ34585 Human met
124	18	2.8	4670	AAK67409	AAK67409 Human imm	c 181	18	2.8	15161	6	ABJ70458	ABJ70458 Human met
125	18	2.8	4670	AAK67410	AAK67410 Human imm	c 182	18	2.8	15161	6	AA561423	AA561423 Human gen
c 126	18	2.8	5326	ABJ29736	ABJ29736 Drosophila	183	18	2.8	15853	6	ABU70466	ABU70466 Human gen
c 127	18	2.8	5702	AD663604	AD663604 Rat gene	184	18	2.8	15853	6	AA561457	AA561457 Human gen
c 128	18	2.8	5702	AD663603	AD663603 Rat gene	185	18	2.8	16258	6	ABK40037	ABK40037 Human che
c 129	18	2.8	5702	AD663605	AD663605 Rat gene	186	18	2.8	16258	6	ABJ70375	ABJ70375 Human che
c 130	18	2.8	5702	AD663606	AD663606 Rat gene	c 187	18	2.8	17137	6	ABJ32190	ABJ32190 Human imm
c 131	18	2.8	5935	AA545426	AA545426 Chemical	c 188	18	2.8	18011	6	ABJ32035	ABJ32035 Human imm
c 132	18	2.8	6012	ABJ34059	ABJ34059 Human imm	189	18	2.8	18060	6	ABJ92212	ABJ92212 Human imm
c 133	18	2.8	6020	ABJ32199	ABJ32199 Human imm	190	18	2.8	18060	6	AAJ22313	AAJ22313 Chemical
c 134	18	2.8	6020	ABJ49308	ABJ49308 Human pol	191	18	2.8	18624	6	ABJ33703	ABJ33703 Human imm
c 135	18	2.8	6149	AA563307	AA563307 Chemical	c 192	18	2.8	19131	4	AA546717	AA546717 Tumour su
136	18	2.8	6167	ABK31406	ABK31406 Signal tr	c 193	18	2.8	20268	4	AAK90183	AAK90183 Human dfg
137	18	2.8	6167	ABJ70367	ABJ70367 Chemical	c 194	18	2.8	20268	4	AAI57636	AAI57636 Human col
138	18	2.8	6167	AA561329	AA561329 Human gen	c 195	18	2.8	20268	6	AB599813	AB599813 Genomic D
c 139	18	2.8	6175	AAJ28373	AAJ28373 Human che	c 196	18	2.8	20268	9	ADB92966	ADB92966 Human col
c 140	18	2.8	6204	AA545482	AA545482 Chemical	197	18	2.8	33053	6	ABQ67005	ABQ67005 Human ang
c 141	18	2.8	6204	ABJ34003	ABJ34003 Human imm	198	18	2.8	34488	5	AA597854	AA597854 Human neu
c 142	18	2.8	6204	ABK31477	ABK31477 Signal tr	c 199	18	2.8	34488	5	ABQ67059	ABQ67059 Human ang
c 143	18	2.8	6204	ABK28406	ABK28406 DNA trans	c 200	18	2.8	46852	7	ABQ76676	ABQ76676 Androgen
c 144	18	2.8	6204	ABN80267	ABN80267 Human che	c 201	18	2.8	46852	8	ADA02603	ADA02603 Mouse 112
c 145	18	2.8	6254	ABJ33621	ABJ33621 Human imm	c 202	18	2.8	46852	9	ADB72341	ADB72341 Mouse 112
c 146	18	2.8	6359	ABK39944	ABK39944 Human che	203	18	2.8	65787	9	ADB72341	ADB72341 Mouse 112
c 147	18	2.8	6392	ABJ32684	ABJ32684 Human imm	204	18	2.8	96389	8	ADB72413	ADB72413 Mouse Top
c 148	18	2.8	6392	ABJ34506	ABJ34506 Human met	c 205	18	2.8	110000	2	AAJ20248	AAJ20248 02
c 149	18	2.8	6467	ABN80169	ABN80169 Human che	206	18	2.8	110000	6	ABX08346	ABX08346 02
c 150	18	2.8	6582	ABQ74268	ABQ74268 Human 670	c 207	18	2.8	110000	6	ABA90521_00	ABA90521_00
c 151	18	2.8	6582	ADQ37486	ADQ37486 Human tra	c 208	18	2.8	110000	6	ABA90521_05	ABA90521_05
c 152	18	2.8	6609	ABJ33302	ABJ33302 Human imm	209	18	2.8	110000	6	ABQ67196_1	ABQ67196_1
c 153	18	2.8	6620	AA545487	AA545487 Chemical	210	18	2.8	110000	6	ABQ69245_25	ABQ69245_25
c 154	18	2.8	6620	ABK28415	ABK28415 DNA trans	211	18	2.8	110000	7	ACF65383_0	ACF65383_0
c 155	18	2.8	6620	ABN80278	ABN80278 Human che	c 212	18	2.8	110000	7	ACF67367_00	ACF67367_00
c 156	18	2.8	6727	ABJ33297	ABJ33297 Human imm	c 213	18	2.8	110000	7	ACF67367_16	ACF67367_16
c 157	18	2.8	6759	ABJ32739	ABJ32739 Human imm	c 214	18	2.8	110000	7	ACF67367_16	ACF67367_16
c 158	18	2.8	6852	ABJ70311	ABJ70311 Chemical	215	18	2.8	121162	3	AA596661	AA596661
c 159	18	2.8	6852	AA561249	AA561249 Human gen	216	18	2.8	121162	3	AA596661	AA596661
c 160	18	2.8	6880	ABJ32453	ABJ32453 Human imm	217	18	2.8	129021	3	AA596661	AA596661
c 161	18	2.8	7060	ABJ29390	ABJ29390 Drosophila	c 218	18	2.8	139904	6	ABK83562	ABK83562 Human cin
c 162	18	2.8	7106	ABJ33478	ABJ33478 Human imm	c 219	18	2.8	160771	6	ABQ88179	ABQ88179 Human ost
c 163	18	2.8	7165	ABJ32750	ABJ32750 Human imm	c 220	18	2.8	210710	7	ACF65380	ACF65380 Photocarb
c 164	18	2.8	7165	ABK31266	ABK31266 Signal tr	c 221	18	2.8	218336	7	ABQ76678	ABQ76678 Androgen
c 165	18	2.8	7165	ABJ70221	ABJ70221 Chemical	222	18	2.8	235033	2	AAV57926	AAV57926 Heredilar
c 166	18	2.8	7242	AB565034	AB565034 Invertebr	223	18	2.6	20	6	AA596661	AA596661 Telomeres
c 167	18	2.8	7360	ABJ33223	ABJ33223 Human imm	224	18	2.6	177	8	ABK41754	ABK41754 cDNA enco
c 168	18	2.8	9468	AAV25602	AAV25602 Feline im	225	18	2.6	184	6	ABV97353	ABV97353 Human pan
c 169	18	2.8	9817	ABJ33368	ABJ33368 Human imm	226	18	2.6	228	2	AAV08292	AAV08292 Forcine f
c 170	18	2.8	9848	ABJ33798	ABJ33798 Human imm	c 227	18	2.6	257	7	AAJ55534	AAJ55534 Human col
c 171	18	2.8	9881	ABJ54453	ABJ54453 Chemical	228	18	2.6	257	7	AAJ55534	AAJ55534 Human col
c 172	18	2.8	10552	ABK31426	ABK31426 Signal tr	c 229	18	2.6	276	7	ABZ41094	ABZ41094 N. gonorr
c 173	18	2.8	10552	ABJ70387	ABJ70387 Chemical	230	18	2.6	276	7	ABZ41094	ABZ41094 N. gonorr
c 174	18	2.8	10856	AA561339	AA561339 Human gen	231	18	2.6	276	7	ACM41482	ACM41482 Prokaryot
c 175	18	2.8	10856	ABJ32456	ABJ32456 Human imm	232	18	2.6	279	7	ACM41482	ACM41482 Prokaryot
c 176	18	2.8	12711	ABJ34525	ABJ34525 Human met	233	18	2.6	329	3	AAJ07773	AAJ07773 Human sec
c 177	18	2.8	12711	ABJ70250	ABJ70250 Chemical	c 234	18	2.6	360	7	ABX65094	ABX65094 Human gen
c 178	18	2.8	13294	AAK65255	AAK65255 Human imm	235	18	2.6	366	4	ABK42355	ABK42355 Genomic s



c 236	17	2.6	366	4	ABK42356	Abi442356 Genomic s
c 237	17	2.6	366	8	ADB60312	Adb60312 Connectiv
c 238	17	2.6	366	8	ADB60311	Adb60311 Connectiv
c 239	17	2.6	369	5	ABV07523	Abv07523 Human pro
c 240	17	2.6	377	7	ABSS7760	Abss7760 Genome anq
c 241	17	2.6	379	4	AA528559	AA528559 Genomic s
c 242	17	2.6	379	4	AA528057	AA528057 Novel cDN
c 243	17	2.6	380	7	ABK44170	Abk44170 Bovine ES
c 244	17	2.6	386	9	ADBS1762	Adbs1762 Tox1c1c1y-
c 245	17	2.6	386	9	ADBS1718	Adbs1718 Primary r
c 246	17	2.6	389	5	AA664257	AA664257 Novel hum
c 247	17	2.6	395	5	AA664574	AA664574 Novel hum
c 248	17	2.6	396	5	ABV10093	Abv10093 Human pro
c 249	17	2.6	397	5	ABV37455	Abv37455 Human pro
c 250	17	2.6	408	5	ABV09966	Abv09966 Human pro
c 251	17	2.6	408	5	ABV00924	Abv00924 Human pro
c 252	17	2.6	415	5	ABV00797	Abv00797 Human pro
c 253	17	2.6	416	4	AA192616	AA192616 Human pol
c 254	17	2.6	433	5	ABV31265	Abv31265 Human pro
c 255	17	2.6	437	4	ABD16740	Abd16740 Human nov
c 256	17	2.6	437	4	ABV06618	Abv06618 Human cDN
c 257	17	2.6	437	5	ABA13498	AbA13498 Human ner
c 258	17	2.6	437	6	ABN65612	Abn65612 Human can
c 259	17	2.6	437	6	ABV83955	Abv83955 Human pol
c 260	17	2.6	437	7	ACA61650	AcA61650 cDNA enco
c 261	17	2.6	443	4	AA117153	AA117153 Human bre
c 262	17	2.6	452	5	ABV40234	Abv40234 Human pro
c 263	17	2.6	452	5	ABV31140	Abv31140 Human pro
c 264	17	2.6	452	5	ABV40108	Abv40108 Human pro
c 265	17	2.6	456	6	ABSO5460	Abso5460 Human gen
c 266	17	2.6	468	2	AAV86346	AAV86346 EST clone
c 267	17	2.6	473	6	ABK79421	Abk79421 Bacillus
c 268	17	2.6	483	6	ABV94025	Abv94025 Breast ca
c 269	17	2.6	498	6	ABN65290	Abn65290 Human can
c 270	17	2.6	503	6	ABV57161	Abv57161 Human pro
c 271	17	2.6	503	6	ABQ31106	Abq31106 Oligonuc
c 272	17	2.6	503	6	ABQ31107	Abq31107 Oligonuc
c 273	17	2.6	513	4	ABA61907	AbA61907 Human fce
c 274	17	2.6	513	4	AAK36116	AAK36116 Human bon
c 275	17	2.6	513	4	AAK10218	AAK10218 Human bra
c 276	17	2.6	526	6	ABQ92790	Abq92790 Trifletum
c 277	17	2.6	527	6	ABT07906	Abt07906 Human lun
c 278	17	2.6	552	6	ABQ16336	Abq16336 Oligonuc
c 279	17	2.6	552	6	ABQ16337	Abq16337 Oligonuc
c 280	17	2.6	561	7	ACA27984	AcA27984 Prokaryot
c 281	17	2.6	579	6	ABV53656	Abv53656 Human pro
c 282	17	2.6	579	6	ABT07907	Abt07907 Human lun
c 283	17	2.6	585	5	AA571445	AA571445 DNA enco
c 284	17	2.6	586	5	ABV59028	Abv59028 Human pro
c 285	17	2.6	588	6	ABQ40397	Abq40397 Oligonuc
c 286	17	2.6	588	6	ABQ40396	Abq40396 Oligonuc
c 287	17	2.6	590	6	ABD35081	Abd35081 Mouse mlt
c 288	17	2.6	591	4	AA279274	AA279274 Human lun
c 289	17	2.6	591	4	AA223350	AA223350 Human lun
c 290	17	2.6	591	9	ADP66624	Adp66624 Human lun
c 291	17	2.6	591	9	ADP87878	Adp87878 Human lun
c 292	17	2.6	620	6	ABQ48336	Abq48336 Oligonuc
c 293	17	2.6	620	6	ABQ48337	Abq48337 Oligonuc
c 294	17	2.6	624	7	ACF69878	AcF69878 Phototrab
c 295	17	2.6	628	4	AA444913	AA444913 Human bre
c 296	17	2.6	657	6	ABQ33142	Abq33142 Oligonuc
c 297	17	2.6	657	6	ABQ33143	Abq33143 Oligonuc
c 298	17	2.6	665	4	AAH33146	AAH33146 Human col
c 299	17	2.6	680	6	ABQ23708	Abq23708 Oligonuc
c 300	17	2.6	680	6	ABQ23709	Abq23709 Oligonuc
c 301	17	2.6	689	7	ADA68705	Ada68705 Rice gene
c 302	17	2.6	695	6	ABQ46540	Abq46540 Oligonuc
c 303	17	2.6	695	6	ABQ53161	Abq53161 Oligonuc
c 304	17	2.6	695	6	ABQ46541	Abq46541 Oligonuc
c 305	17	2.6	695	6	ABQ53160	Abq53160 Oligonuc
c 306	17	2.6	697	4	ABL15733	ABL15733 Drosoph11
c 307	17	2.6	707	4	AAH34792	AAH34792 Human col
c 308	17	2.6	730	4	AA528560	AA528560 Genomic s
c 309	17	2.6	747	5	AA589648	AA589648 DNA enco
c 310	17	2.6	748	5	AA593166	AA593166 DNA enco
c 311	17	2.6	767	4	AAK58473	AAK58473 Human imm
c 312	17	2.6	785	5	ABV26371	Abv26371 Human pro
c 313	17	2.6	785	5	ABV26451	Abv26451 Human pro
c 314	17	2.6	785	5	ABV20532	Abv20532 Human pro
c 315	17	2.6	785	5	ABV20610	Abv20610 Human pro
c 316	17	2.6	855	6	ABQ48278	Abq48278 Oligonuc
c 317	17	2.6	855	6	ABQ48279	Abq48279 Oligonuc
c 318	17	2.6	855	6	ABK78996	Abk78996 Bacillus
c 319	17	2.6	867	6	ABK78996	Abk78996 Bacillus
c 320	17	2.6	872	6	ABQ34616	Abq34616 Oligonuc
c 321	17	2.6	872	6	ABQ34617	Abq34617 Oligonuc
c 322	17	2.6	880	4	AAH93204	AAH93204 Human pro
c 323	17	2.6	930	4	ABA09245	ABA09245 Human sec
c 324	17	2.6	930	4	AAK53129	AAK53129 Human pol
c 325	17	2.6	1001	3	AAK53129	AAK53129 Human pol
c 326	17	2.6	1020	6	ABQ27514	Abq27514 Oligonuc
c 327	17	2.6	1020	6	ABQ27515	Abq27515 Oligonuc
c 328	17	2.6	1063	6	ABN06362	ABN06362 Human cDN
c 329	17	2.6	1063	7	ABN06362	ABN06362 Human cDN
c 330	17	2.6	1083	7	ACA30755	AcA30755 Prokaryot
c 331	17	2.6	1089	3	AAK41880	AAK41880 Arabidops
c 332	17	2.6	1091	3	AAK50956	AAK50956 Arabidops
c 333	17	2.6	1096	4	AAK16737	AAK16737 Human nov
c 334	17	2.6	1096	7	ACA61647	AcA61647 cDNA enco
c 335	17	2.6	1098	6	ABQ46497	Abq46497 Oligonuc
c 336	17	2.6	1098	6	ABQ46496	Abq46496 Oligonuc
c 337	17	2.6	1112	6	ABK79021	Abk79021 Bacillus
c 338	17	2.6	1122	8	ADA28927	Ada28927 DNA enco
c 339	17	2.6	1182	6	ABZ31868	Abz31868 Candida a
c 340	17	2.6	1269	6	ABQ41990	Abq41990 Oligonuc
c 341	17	2.6	1269	6	ABQ41991	Abq41991 Oligonuc
c 342	17	2.6	1272	6	ABN83226	ABN83226 Human hee
c 343	17	2.6	1286	3	AAK50145	AAK50145 Arabidops
c 344	17	2.6	1300	3	AAZ61504	AAZ61504 DNA enco
c 345	17	2.6	1302	7	ACF75447	ACF75447 Stephyloc
c 346	17	2.6	1336	6	ABV77611	ABV77611 Setine th
c 347	17	2.6	1354	6	ABZ11583	Abz11583 Human pol
c 348	17	2.6	1356	7	ADA67847	Ada67847 Arabidops
c 349	17	2.6	1374	7	ACA30203	AcA30203 Prokaryot

350	17	2.6	1403	7	ADA72445	Ada72445	Rice gene	407	17	2.6	4163	6	ABL34331	Ab134331	Human imm
351	17	2.6	1770	3	AAFI5968	Aafi5968	Human pro	408	17	2.6	4190	6	ABL32443	Ab132443	Human imm
352	17	2.6	1526	9	ADDO5234	Ado05234	Adenylylate	409	17	2.6	4190	9	ADB69149	Abd69149	C. neofor
353	17	2.6	1538	3	AAQ47155	Aaq47155	Arabiidops	410	17	2.6	4227	4	ABL18518	Ab118518	Arabiidops
354	17	2.6	1622	9	ADBS7516	Adbs7516	Human gen	411	17	2.6	4231	5	ABV24836	Abv24836	Human pro
355	17	2.6	1622	9	ADBS7520	Adbs7520	Human gen	412	17	2.6	4231	5	ABV24836	Abv24836	Human pro
356	17	2.6	1795	4	AAH76414	Aah76414	RGS prote	413	17	2.6	4231	5	ABV23325	Abv23325	Human pro
357	17	2.6	1857	6	ABQ67921	Abq67921	Lstetaria	414	17	2.6	4263	4	ABL18878	Ab118878	Human pro
358	17	2.6	1857	6	ABQ69940	Abq69940	Lstetaria	415	17	2.6	4554	7	ACA30282	Acc30282	Prokaryot
359	17	2.6	1858	7	ABT42965	Abt42965	Human neu	416	17	2.6	4930	6	ABK92231	Abk92231	Prokaryot
360	17	2.6	1911	6	ABL34257	Ab134257	Human imm	417	17	2.6	5033	4	AA546374	Aas46374	Tumour su
361	17	2.6	1938	9	ADCS3281	Adcs3281	Human nov	418	17	2.6	5209	6	ABL32186	Ab132186	Human imm
362	17	2.6	1949	2	AAK33531	Aak33531	Rice beta	419	17	2.6	5252	6	ABL33135	Ab133135	Human imm
363	17	2.6	2000	6	ABE16206	Abt16206	Arabiidops	420	17	2.6	5269	6	ABL34056	Ab134056	Human imm
364	17	2.6	2000	6	ABE15378	Abt15378	Arabiidops	421	17	2.6	5271	2	AAK20505	Aak20505	Polynucle
365	17	2.6	2000	6	ABE15499	Abt15499	Arabiidops	422	17	2.6	5273	6	ABL32874	Ab132874	Human imm
366	17	2.6	2000	6	ABE16827	Abt16827	Arabiidops	423	17	2.6	5291	4	ABL07282	Ab107282	Arabiidops
367	17	2.6	2000	6	ABE15642	Abt15642	Arabiidops	424	17	2.6	5304	6	ABK28356	Abk28356	Human che
368	17	2.6	2000	6	ABE16940	Abt16940	Arabiidops	425	17	2.6	5307	6	ABK40043	Abk40043	Human che
369	17	2.6	2000	7	ADM73466	Adm73466	Rice gene	426	17	2.6	5307	6	ABL70393	Ab170393	Chemical cell
370	17	2.6	2000	7	ADA73412	Ada73412	Rice gene	427	17	2.6	5313	6	ABL32762	Ab132762	Human imm
371	17	2.6	2000	7	ADA72746	Ada72746	Rice gene	428	17	2.6	5347	6	ABL33668	Ab133668	Human imm
372	17	2.6	2000	7	ADA69320	Ada69320	Arabiidops	429	17	2.6	5406	6	ABL33099	Ab133099	Human imm
373	17	2.6	2000	7	ADA72067	Ada72067	Rice gene	430	17	2.6	5429	5	AAE28637	Aae28637	Human imm
374	17	2.6	2023	5	AA582278	Aas82278	DNA encod	431	17	2.6	5429	5	AAE28637	Aae28637	Human imm
375	17	2.6	2135	7	ACM28888	Acc28888	Prokaryot	432	17	2.6	5437	6	AAE28536	Aae28536	Arabiidops
376	17	2.6	2190	9	ADCS0689	Adcs0689	E. faeculi	433	17	2.6	5454	3	AAA70236	Aaa70236	Human imm
377	17	2.6	2276	6	ABL60317	Ab160317	Human DNA	434	17	2.6	5460	6	ABL33904	Ab133904	Human imm
378	17	2.6	2285	4	ABL22808	Ab122808	Drosophill	435	17	2.6	5477	6	ABK34021	Abk34021	Human DNA
379	17	2.6	2306	4	ABL08362	Ab108362	Drosophill	436	17	2.6	5477	7	ADM20445	Adm20445	Prostate
380	17	2.6	2339	4	ABL21948	Ab121948	Drosophill	437	17	2.6	5477	7	ADM20445	Adm20445	Prostate
381	17	2.6	2369	2	AAI799557	Aai799557	Phytolacc	438	17	2.6	5491	4	AA546390	Aas46390	Tumour su
382	17	2.6	2369	2	ABA96543	Abi96543	Phytolacc	439	17	2.6	5659	6	ABL32796	Ab132796	Human imm
383	17	2.6	2392	4	ABL15536	Ab115536	Drosophill	440	17	2.6	5683	6	ABL33807	Ab133807	Human imm
384	17	2.6	2400	6	ABL34366	Ab134366	Human imm	441	17	2.6	5683	6	ABL34591	Ab134591	Human met
385	17	2.6	2475	5	AA581626	Aas81626	DNA encod	442	17	2.6	5683	6	ABL70400	Ab170400	Chemical cell
386	17	2.6	2493	6	ABE14764	Abt14764	Arabiidops	443	17	2.6	5683	9	ADB54182	Adb54182	Pretearte
387	17	2.6	2567	4	ABL27850	Ab127850	Drosophill	444	17	2.6	5683	9	ADB54182	Adb54182	Pretearte
388	17	2.6	2594	2	AAK13249	Aak13249	Enterococ	445	17	2.6	5693	4	ABL22316	Ab122316	Drosophill
389	17	2.6	2594	6	ABE99044	Abt99044	Enterococ	446	17	2.6	5729	6	ABQ67148	Abq67148	Human ang
390	17	2.6	2711	4	ABL14890	Ab114890	Drosophill	447	17	2.6	5750	4	AA546709	Aas46709	Tumour su
391	17	2.6	2831	2	AAQ03183	Aaq03183	Pyruvate-	448	17	2.6	5763	6	ABL32182	Ab132182	Human imm
392	17	2.6	2847	4	ABL22560	Ab122560	Drosophill	449	17	2.6	5763	6	ABL32182	Ab132182	Human imm
393	17	2.6	2885	2	AAQ02803	Aaq02803	Pyruvate	450	17	2.6	5769	6	ABK40019	Abk40019	Human che
394	17	2.6	2885	2	AAI79632	Aai79632	DNA encod	451	17	2.6	5770	4	ABL19024	Ab119024	Drosophill
395	17	2.6	2899	9	ADD48969	Add48969	Rat gene	452	17	2.6	5781	4	AA527714	Aas27714	Human che
396	17	2.6	2922	9	ADC58115	Adc58115	Caenorhab	453	17	2.6	5781	9	ADB94517	Adb94517	Novel hum
397	17	2.6	2982	4	ABL15732	Ab115732	Drosophill	454	17	2.6	5782	4	AA527715	Aas27715	DNA encod
398	17	2.6	3065	4	AAH54366	Aah54366	S. opidier	455	17	2.6	5782	4	AA527715	Aas27715	DNA encod
399	17	2.6	3366	3	AAH70175	Aah70175	Plasmodiu	456	17	2.6	5879	6	ADB94518	Adb94518	Novel hum
400	17	2.6	3692	4	AAH74295	Aah74295	S. cerevis	457	17	2.6	5883	6	ABL32268	Ab132268	Human imm
401	17	2.6	3739	3	AAH81547	Aah81547	N. mening	458	17	2.6	5886	6	ABL32733	Ab132733	Human imm
402	17	2.6	3742	2	AAV63172	Aav63172	cDNA from	459	17	2.6	5975	6	ABL32237	Ab132237	Human imm
403	17	2.6	3840	3	AA660046	Aac60046	Human sec	460	17	2.6	5984	6	ABQ66994	Abq66994	Human ang
404	17	2.6	3855	7	ACA52780	Acc52780	Prokaryot	461	17	2.6	6046	4	AA545311	Aas45311	Chemical cell
405	17	2.6	3948	4	ABL09642	Ab109642	Drosophill	462	17	2.6	6046	6	ABK28150	Abk28150	Human che
406	17	2.6	4118	4	ABU03892	Ab103892	Drosophill	463	17	2.6	6048	4	AA546614	Aas46614	Tumour su

464	17	2.6	6061	4	AA545335	AA545335	Chemical	521	17	2.6	6968	6	ABL34441	ABL34441	Human imm
465	17	2.6	6065	6	ABK31357	AbK31357	Signal tr	522	17	2.6	7011	6	ABK39940	ABK39940	Human che
466	17	2.6	6065	6	ABL70580	ABL70580	Chemical	523	17	2.6	7011	6	ABL32546	ABL32546	Human imm
467	17	2.6	6065	6	AA561261	AA561261	Human gen	524	17	2.6	7025	6	ABK40060	ABK40060	Human che
468	17	2.6	6070	6	ABL33678	AbI33678	Human imm	525	17	2.6	7025	6	AA563351	AA563351	Chemical
469	17	2.6	6070	6	ABL34578	AbI34578	Human met	526	17	2.6	7049	6	ABL32157	ABL32157	Human imm
470	17	2.6	6070	6	ABL70371	AbI70371	Chemical	527	17	2.6	7049	6	ABL54306	ABL54306	Chemical
471	17	2.6	6070	6	ABQ67129	AbQ67129	Human ang	528	17	2.6	7225	4	ABL01994	ABL01994	Human imm
472	17	2.6	6104	6	AA546296	AA546296	Tumour su	529	17	2.6	7351	6	ABL32028	ABL32028	Human imm
473	17	2.6	6104	6	ABL32297	AbI32297	Human imm	530	17	2.6	7430	2	AAV31250	AAV31250	E. coli J
474	17	2.6	6104	9	ADB54104	ADB54104	Pretrearte	531	17	2.6	7436	6	ABL33930	ABL33930	Human imm
475	17	2.6	6104	9	ADB54232	ADB54232	Pretrearte	532	17	2.6	7456	6	ABL92292	ABL92292	Human imm
476	17	2.6	6106	4	AA546429	AA546429	Tumour su	533	17	2.6	7461	6	ABL33784	ABL33784	Human imm
477	17	2.6	6106	6	ABK40031	AbK40031	Human che	534	17	2.6	7511	6	ABL33283	ABL33283	Human imm
478	17	2.6	6107	6	ABK31472	AbK31472	Human imm	535	17	2.6	7522	6	ABL32914	ABL32914	Human imm
479	17	2.6	6107	6	ABK31431	AbK31431	Signal tr	536	17	2.6	7560	6	ABL32222	ABL32222	Human imm
480	17	2.6	6107	6	ABL70390	AbI70390	Chemical	537	17	2.6	7631	6	ABL32861	ABL32861	Human imm
481	17	2.6	6107	6	AA561342	AA561342	Human gen	538	17	2.6	7659	6	ABL32189	ABL32189	Human imm
482	17	2.6	6115	6	ABL33801	AbI33801	Human imm	539	17	2.6	7771	6	ABL33973	ABL33973	Human imm
483	17	2.6	6121	6	ABL33874	AbI33874	Human imm	540	17	2.6	7819	6	ABL33953	ABL33953	Human imm
484	17	2.6	6127	6	ABL33615	AbI33615	Human imm	541	17	2.6	7819	6	ABL34607	ABL34607	Human imm
485	17	2.6	6134	6	ABL33164	AbI33164	Human imm	542	17	2.6	7906	4	AA545391	AA545391	Human met
486	17	2.6	6138	4	ABL10128	AbI10128	Drosophill	543	17	2.6	7906	6	ABK28236	ABK28236	Human imm
487	17	2.6	6143	4	AA107041	AA107041	Human rep	544	17	2.6	7906	6	ABK80179	ABK80179	DNA trans
488	17	2.6	6174	6	ABL33509	AbI33509	Human imm	545	17	2.6	8129	4	AA546764	AA546764	Human che
489	17	2.6	6174	6	ABK28393	AbK28393	Human che	546	17	2.6	8168	6	ABL32929	ABL32929	Human imm
490	17	2.6	6216	6	ABK39332	AbK39332	Human che	547	17	2.6	8168	6	AA563329	AA563329	Chemical
491	17	2.6	6216	6	ABL70139	AbI70139	Chemical	548	17	2.6	8201	6	ABL32307	ABL32307	Human imm
492	17	2.6	6222	6	ABL32238	AbI32238	Human imm	549	17	2.6	8201	6	ABL54328	ABL54328	Chemical
493	17	2.6	6227	6	ABL34499	AbI34499	Human met	550	17	2.6	8237	4	AA546802	AA546802	Tumour su
494	17	2.6	6227	6	ABL70176	AbI70176	Chemical	551	17	2.6	8323	4	ABL32058	ABL32058	Human imm
495	17	2.6	6228	6	ABK31966	AbK31966	Signal tr	552	17	2.6	8346	6	ABK28328	ABK28328	DNA trans
496	17	2.6	6228	6	ABL70469	AbI70469	Chemical	553	17	2.6	8372	4	AA546353	AA546353	Tumour su
497	17	2.6	6228	6	AA561430	AA561430	Human gen	554	17	2.6	8467	6	ABL32109	ABL32109	Human imm
498	17	2.6	6277	6	AA546729	AA546729	Tumour su	555	17	2.6	8530	6	ABL33755	ABL33755	Human imm
499	17	2.6	6277	6	ABL34041	AbI34041	Human imm	556	17	2.6	8530	6	ABK31415	ABK31415	Human imm
500	17	2.6	6286	4	AA546592	AA546592	Tumour su	557	17	2.6	8551	5	AA572883	AA572883	DNA encod
501	17	2.6	6306	4	AA545515	AA545515	Chemical	558	17	2.6	8592	6	ABL33982	ABL33982	Human imm
502	17	2.6	6306	6	ABK28457	AbK28457	DNA trans	559	17	2.6	8614	4	AAK74343	AAK74343	Human imm
503	17	2.6	6368	6	ABL33839	AbI33839	Human imm	560	17	2.6	8771	6	AAK73824	AAK73824	Human imm
504	17	2.6	6368	6	ABL92299	AbI92299	Chemical	561	17	2.6	8805	6	ABL32513	ABL32513	Human imm
505	17	2.6	6368	6	ABL49368	AbI49368	Human pol	562	17	2.6	9018	6	ABK31256	ABK31256	Signal tr
506	17	2.6	6408	4	AAK89966	AAK89966	Human dig	563	17	2.6	9018	6	ABL70211	ABL70211	Chemical
507	17	2.6	6413	4	AA546362	AA546362	Tumour su	564	17	2.6	9018	6	AA561166	AA561166	Human che
508	17	2.6	6413	6	ABQ67000	AbQ67000	Human ang	565	17	2.6	9018	6	ABK80078	ABK80078	Human imm
509	17	2.6	6464	6	ABL32514	AbI32514	Human imm	566	17	2.6	9180	6	ABL33964	ABL33964	Human imm
510	17	2.6	6509	6	ABL32227	AbI32227	Human imm	567	17	2.6	9206	6	ABL33674	ABL33674	Human imm
511	17	2.6	6561	6	ABK80021	AbK80021	Human che	568	17	2.6	9238	6	ABK28365	ABK28365	Human imm
512	17	2.6	6564	6	ABL32123	AbI32123	Human imm	569	17	2.6	9306	4	ABL12980	ABL12980	Drosophill
513	17	2.6	6566	6	ABK28350	AbK28350	DNA trans	570	17	2.6	9493	2	AAAT00129	AAAT00129	Hepatitis
514	17	2.6	6590	6	ABL33477	AbI33477	Human imm	571	17	2.6	9493	2	AAAT59784	AAAT59784	Hepatitis
515	17	2.6	6668	4	AA546418	AA546418	Tumour su	572	17	2.6	9493	3	AAAS5375	AAAS5375	Hepatitis
516	17	2.6	6668	6	ABL33219	AbI33219	Human imm	573	17	2.6	9547	6	ABL33504	ABL33504	Human imm
517	17	2.6	6668	6	ABK80163	AbK80163	Human che	574	17	2.6	9707	6	ABL33421	ABL33421	Human imm
518	17	2.6	6692	4	AA546410	AA546410	Tumour su	575	17	2.6	9760	6	ABK31242	ABK31242	Signal tr
519	17	2.6	6907	6	ABL32266	AbI32266	Human imm	576	17	2.6	9760	6	ABL70197	ABL70197	Chemical
520	17	2.6	6977	4	AA546628	AA546628	Tumour su	577	17	2.6	9760	6	AA561155	AA561155	Human gen

578	17	2.6	9859	6	AB134132	Ab134132 Human tmm	c 635	17	2.6	16602	6	ABN80068	Abn80068 Human che
c 579	17	2.6	9869	4	AAE69947	AAE69947 Human TNF	c 636	17	2.6	16633	6	ABN79984	Abn79984 Human che
c 580	17	2.6	9898	2	AAV20767	AAV20767 Human OCI	c 637	17	2.6	16720	6	AB132415	Ab132415 Human tmm
c 581	17	2.6	9997	6	AB132369	Ab132369 Human tmm	c 638	17	2.6	16720	6	AA561119	AA561119 Human gen
c 582	17	2.6	9997	6	AB134485	Ab134485 Human met	c 639	17	2.6	16766	6	AB134156	Ab134156 Human tmm
c 583	17	2.6	10190	2	AA733183	AA733183 Fragment	c 640	17	2.6	17280	4	AA546772	AA546772 Human tmm
c 584	17	2.6	10231	8	ACR03989	ACR03989 Human cDN	c 641	17	2.6	17419	4	AA545393	AA545393 Human tmm
c 585	17	2.6	10329	6	AB134123	Ab134123 Human tmm	c 642	17	2.6	17419	6	AB133295	Ab133295 Human tmm
586	17	2.6	10609	4	AA546360	AA546360 Tumour su	c 643	17	2.6	17419	6	ABK28238	Abk28238 Human tmm
587	17	2.6	10609	6	ABK31269	Abk31269 Signal tr	c 644	17	2.6	17594	6	AB134027	Ab134027 Human tmm
c 589	17	2.6	10710	6	AB132892	Ab132892 Human tmm	c 645	17	2.6	18218	6	AB133949	Ab133949 Human tmm
c 590	17	2.6	10710	6	AB132892	Ab132892 Human tmm	c 646	17	2.6	18218	6	AB133948	Ab133948 Human tmm
591	17	2.6	10996	6	AA546806	AA546806 Tumour su	c 647	17	2.6	18357	6	AB067083	AB067083 Human tmm
592	17	2.6	10996	6	ABK28466	ABK28466 DNA trans	c 648	17	2.6	18359	2	AAK20255	AAK20255 Human arg
c 593	17	2.6	11691	6	AB134241	Ab134241 Human tmm	c 649	17	2.6	18512	6	AB132977	Ab132977 Human tmm
c 594	17	2.6	12054	6	AB133178	Ab133178 Human tmm	c 650	17	2.6	18683	6	AB132312	Ab132312 Human tmm
c 595	17	2.6	12069	6	ABK39930	ABK39930 Human che	c 651	17	2.6	18683	6	AB154333	AB154333 Chemical
c 596	17	2.6	12177	6	AB132650	Ab132650 Human tmm	c 652	17	2.6	18988	4	AA546342	AA546342 Human tmm
597	17	2.6	12356	4	AA546509	AA546509 Tumour su	c 653	17	2.6	18988	6	AB132701	Ab132701 Human tmm
598	17	2.6	12865	2	AAV62292	AAV62292 Human int	c 654	17	2.6	18988	6	AB134509	Ab134509 Human met
599	17	2.6	12865	2	AAK75925	AAK75925 Human int	c 655	17	2.6	18988	6	AB170204	Ab170204 Chemical
600	17	2.6	12865	2	ABK15530	ABK15530 Human int	c 656	17	2.6	19082	6	AB132627	Ab132627 Human tmm
601	17	2.6	12865	3	AAK63769	AAK63769 Human IL-	c 657	17	2.6	19087	6	AB132793	Ab132793 Human tmm
602	17	2.6	12865	4	AAE27667	AAE27667 IL-1RN DN	c 658	17	2.6	19233	6	AB148345	AB148345 Human pol
603	17	2.6	12865	5	AAK91435	AAK91435 Human IL-	c 659	17	2.6	19429	4	AA530443	AA530443 DNA encod
604	17	2.6	12865	7	AAJ05165	AAJ05165 Human int	c 660	17	2.6	19429	4	AAK71692	AAK71692 Human tmm
605	17	2.6	12865	7	AAK44353	AAK44353 Human int	c 661	17	2.6	19429	4	AAJ06223	AAJ06223 Human rep
606	17	2.6	12865	7	AAJ54517	AAJ54517 Secreted	c 662	17	2.6	19429	5	ABK14454	ABK14454 Human rep
607	17	2.6	13131	6	AB192249	AB192249 Chemical	c 663	17	2.6	19459	6	ABK31212	ABK31212 Signal tr
c 608	17	2.6	13171	6	AB105342	Ab105342 Drosophila	c 664	17	2.6	19459	6	AB170527	AB170527 Chemical
c 609	17	2.6	13453	6	ABN80176	ABN80176 Human che	c 665	17	2.6	19653	6	AB133335	AB133335 Human tmm
610	17	2.6	13511	6	AB132280	Ab132280 Human tmm	c 666	17	2.6	20300	4	AA530441	AA530441 DNA encod
611	17	2.6	13574	6	AB133316	Ab133316 Human tmm	c 667	17	2.6	20300	4	AAK71686	AAK71686 Human tmm
612	17	2.6	13584	6	AB132615	Ab132615 Human tmm	c 668	17	2.6	20300	5	AAJ06221	AAJ06221 Human rep
c 613	17	2.6	13584	6	AB132614	Ab132614 Human tmm	c 669	17	2.6	20300	5	ABK14452	ABK14452 Human rep
614	17	2.6	13724	4	AB114676	Ab114676 Drosophila	c 670	17	2.6	20566	4	AAK87596	AAK87596 Human tmm
615	17	2.6	13792	6	AB133571	Ab133571 Human tmm	c 671	17	2.6	20752	4	AAK75098	AAK75098 Human tmm
616	17	2.6	14147	4	AA546744	AA546744 Tumour su	c 672	17	2.6	21537	6	AB133939	AB133939 Human tmm
617	17	2.6	14147	6	ABK33956	ABK33956 Human DNA	c 673	17	2.6	21667	4	AA503568	AA503568 Human tmm
618	17	2.6	14147	7	ADA20387	ADA20387 Prostate	c 674	17	2.6	22008	4	AA536610	AA536610 Human car
619	17	2.6	14147	9	ADK84194	ADK84194 Human ren	c 675	17	2.6	22008	5	ABK15839	ABK15839 Human car
620	17	2.6	14147	9	ADK54098	ADK54098 Pretreaste	c 676	17	2.6	22008	7	ABK16888	ABK16888 Human sec
621	17	2.6	14147	9	ADK54226	ADK54226 Pretreaste	c 677	17	2.6	22008	7	ABK73737	ABK73737 Human sec
622	17	2.6	14147	9	ADK84164	ADK84164 Human tmm	c 678	17	2.6	22008	7	ABK73783	ABK73783 Secreted
623	17	2.6	14147	9	ADK84088	ADK84088 Human tmm	c 679	17	2.6	22008	7	ADK98459	ADK98459 Human sec
624	17	2.6	14712	6	ABN80249	ABN80249 Human tmm	c 680	17	2.6	22008	9	ADC20627	ADC20627 Human sec
625	17	2.6	15435	4	AB114186	Ab114186 Drosophila	c 681	17	2.6	22008	9	ADC47304	ADC47304 Human car
626	17	2.6	15448	6	AB134154	Ab134154 Human tmm	c 682	17	2.6	22140	4	AA530444	AA530444 DNA encod
627	17	2.6	15698	6	AB134141	Ab134141 Human tmm	c 683	17	2.6	22140	4	AAK71693	AAK71693 Human tmm
628	17	2.6	15743	6	ABK28395	ABK28395 DNA trans	c 684	17	2.6	22140	4	AAJ06224	AAJ06224 Human tmm
c 629	17	2.6	15853	6	AB170466	AB170466 Chemical	c 685	17	2.6	22141	5	ABK14455	ABK14455 Human rep
c 630	17	2.6	15853	6	AA561457	AA561457 Human gen	c 686	17	2.6	22141	4	AA530442	AA530442 DNA encod
631	17	2.6	15861	6	AB132524	AB132524 Human tmm	c 687	17	2.6	22141	4	AAK71689	AAK71689 Human tmm
632	17	2.6	16579	9	ADK54246	ADK54246 Pretreaste	c 688	17	2.6	22141	5	AAJ06222	AAJ06222 Human rep
633	17	2.6	16579	9	ADK537773	ADK537773 Human che	c 689	17	2.6	22210	5	ABK14455	ABK14455 Human rep
c 634	17	2.6	16602	6	AB132726	Ab132726 Human tmm	c 690	17	2.6	22210	5	AAK728530	AAK728530 Chemical f
							c 691	17	2.6	23683	6	AB134622	AB134622 Human met

692	17	2.6	23683	6	ABL70481	Ab170481 Chemtcell1	749	17	2.6	94529	8	ADA03086	Ada03086 Human hCG
693	17	2.6	23695	6	ABG66882	AbG66882 Human ang	750	17	2.6	94529	9	ADB72824	AdB72824 Human hCG
694	17	2.6	23695	6	ABG66881	AbG66881 Human ang	751	17	2.6	94531	8	ADA66370	Ada66370 Human hCG
695	17	2.6	24839	6	ABL70569	Ab170569 Chemtcell1	752	17	2.6	95769	7	ADA66659	Ada66659 Arctidops
696	17	2.6	25655	4	AAK76405	AAK76405 Human lmm	753	17	2.6	96595	8	ADA02936	Ada02936 Human BRA
697	17	2.6	26197	4	ABK43078	AbK43078 Genomic s	754	17	2.6	96595	9	ADB72674	AdB72674 Human BRA
698	17	2.6	26197	8	ADB61234	AdB61234 Connectiv	755	17	2.6	96595	9	ADB72674	AdB72674 Human BRA
699	17	2.6	26210	4	ABK43079	AbK43079 Genomic s	756	17	2.6	96596	8	ADA02834	Ada02834 Human BRA
700	17	2.6	26210	4	ABK61235	AbK61235 Connectiv	757	17	2.6	96596	8	ADB72572	AdB72572 Human BRA
701	17	2.6	27156	6	ADA02570	Ada02570 Human gat	758	17	2.6	96596	9	ADC85313	AdC85313 Human MEF
702	17	2.6	27156	9	ADB72308	AdB72308 Human gat	759	17	2.6	96597	9	ADC85340	AdC85340 Human Lmo
703	17	2.6	28413	9	ADC51646	AdC51646 BsnPV gen	761	17	2.6	96597	9	ADC85340	AdC85340 Human Lmo
704	17	2.6	28564	9	ADD46575	AdD46575 Human gen	762	17	2.6	96598	8	ADA02861	Ada02861 Mouse ltp
705	17	2.6	28564	9	ADD46575	AdD46575 Human gen	763	17	2.6	96598	9	ADB72599	AdB72599 Mouse ltp
706	17	2.6	28720	4	ABL07302	Ab107302 Drosoph11	764	17	2.6	96598	9	ADB72599	AdB72599 Mouse ltp
707	17	2.6	29993	9	ADB37662	AdB37662 Human che	765	17	2.6	97658	7	ABQ8210_3	AbQ8210_3
708	17	2.6	32038	4	AAK90877	AAK90877 Human dfg	766	17	2.6	110000	2	AAZ01425_0	AAZ01425_0
709	17	2.6	32038	4	AAK99880	AAK99880 Human dfg	767	17	2.6	110000	2	AAK91990_03	AAK91990_03
710	17	2.6	32038	4	AAK99880	AAK99880 Human dfg	768	17	2.6	110000	6	AAK91990_01	AAK91990_01
711	17	2.6	32038	4	AAK99880	AAK99880 Human dfg	769	17	2.6	110000	6	AAK91990_01	AAK91990_01
712	17	2.6	32038	4	AAK99880	AAK99880 Human dfg	770	17	2.6	110000	6	AAK91990_01	AAK91990_01
713	17	2.6	32038	4	AAK99880	AAK99880 Human dfg	771	17	2.6	110000	6	AAK91990_01	AAK91990_01
714	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	772	17	2.6	110000	6	AAK91990_01	AAK91990_01
715	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	773	17	2.6	110000	6	AAK91990_01	AAK91990_01
716	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	774	17	2.6	110000	6	AAK91990_01	AAK91990_01
717	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	775	17	2.6	110000	6	AAK91990_01	AAK91990_01
718	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	776	17	2.6	110000	6	AAK91990_01	AAK91990_01
719	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	777	17	2.6	110000	6	AAK91990_01	AAK91990_01
720	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	778	17	2.6	110000	6	AAK91990_01	AAK91990_01
721	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	779	17	2.6	110000	6	AAK91990_01	AAK91990_01
722	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	780	17	2.6	110000	6	AAK91990_01	AAK91990_01
723	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	781	17	2.6	110000	6	AAK91990_01	AAK91990_01
724	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	782	17	2.6	110000	6	AAK91990_01	AAK91990_01
725	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	783	17	2.6	110000	6	AAK91990_01	AAK91990_01
726	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	784	17	2.6	110000	6	AAK91990_01	AAK91990_01
727	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	785	17	2.6	110000	6	AAK91990_01	AAK91990_01
728	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	786	17	2.6	110000	6	AAK91990_01	AAK91990_01
729	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	787	17	2.6	110000	6	AAK91990_01	AAK91990_01
730	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	788	17	2.6	110000	6	AAK91990_01	AAK91990_01
731	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	789	17	2.6	110000	6	AAK91990_01	AAK91990_01
732	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	790	17	2.6	110000	6	AAK91990_01	AAK91990_01
733	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	791	17	2.6	110000	6	AAK91990_01	AAK91990_01
734	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	792	17	2.6	110000	6	AAK91990_01	AAK91990_01
735	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	793	17	2.6	110000	6	AAK91990_01	AAK91990_01
736	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	794	17	2.6	110000	6	AAK91990_01	AAK91990_01
737	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	795	17	2.6	110000	6	AAK91990_01	AAK91990_01
738	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	796	17	2.6	110000	6	AAK91990_01	AAK91990_01
739	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	797	17	2.6	110000	6	AAK91990_01	AAK91990_01
740	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	798	17	2.6	110000	6	AAK91990_01	AAK91990_01
741	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	799	17	2.6	110000	6	AAK91990_01	AAK91990_01
742	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	800	17	2.6	110000	6	AAK91990_01	AAK91990_01
743	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	801	17	2.6	110000	6	AAK91990_01	AAK91990_01
744	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	802	17	2.6	110000	6	AAK91990_01	AAK91990_01
745	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	803	17	2.6	110000	6	AAK91990_01	AAK91990_01
746	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	804	17	2.6	110000	6	AAK91990_01	AAK91990_01
747	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	805	17	2.6	110000	6	AAK91990_01	AAK91990_01
748	17	2.6	32154	7	ABX60056	ABX60056 cDNA encod	806	17	2.6	110000	6	AAK91990_01	AAK91990_01

806	16	2.5	42	2	AA035784	Agq35784 H6 Promot	c 863	16	2.5	307	5	ABV61121	Abv61121 Human pro
c 807	16	2.5	46	6	AB565299	Ab565299 A. thelia	864	16	2.5	311	7	ADA83947	Ada83947 Human POM
808	16	2.5	53	6	ABK53142	Abk53142 HIV-1 rev	865	16	2.5	316	4	AAC89750	Aac89750 Human gas
c 809	16	2.5	53	6	AAJ45504	AAJ45504 HIV-1 pol	c 866	16	2.5	319	4	AA538003	Aa538003 Novel hum
c 810	16	2.5	83	6	ABK45880	Abk45880 cDNA emco	c 867	16	2.5	324	5	ABV43477	Abv43477 Human pro
c 811	16	2.5	97	3	AA011023	AA011023 Human sec	c 868	16	2.5	326	5	ABV15088	Abv15088 Human pro
c 812	16	2.5	99	3	AA015302	AA015302 Human sec	c 869	16	2.5	326	5	ABV15089	Abv15089 Human ner
c 813	16	2.5	108	3	AA012250	AA012250 Human sec	c 870	16	2.5	330	4	AA507736	Aa507736 Cervical
c 814	16	2.5	137	2	AAH86489	AAH86489 Human sin	c 871	16	2.5	332	5	ABV19316	Abv19316 Human pro
c 815	16	2.5	144	4	AAE66918	AAE66918 Canine he	872	16	2.5	342	3	AAZ24206	Aaz24206 S. aureus
c 816	16	2.5	144	4	AAE66918	AAE66918 Canine he	c 873	16	2.5	343	6	ABV94131	Abv94131 Breast ca
c 817	16	2.5	144	4	AAE66918	AAE66918 Canine he	c 874	16	2.5	344	8	ACH31878	Ach31878 Human end
c 818	16	2.5	146	2	AA755606	AA755606 Canine he	c 875	16	2.5	345	2	AAV24640	Aav24640 H. pylori
c 819	16	2.5	146	2	AAV66916	AAV66916 Canine he	c 876	16	2.5	345	2	AAV24877	Aav24877 H. pylori
c 820	16	2.5	146	2	AAV66917	AAV66917 Canine he	c 877	16	2.5	345	8	ACH31219	Ach31219 Human bon
c 821	16	2.5	146	2	AAE26737	AAE26737 Canine he	c 878	16	2.5	345	9	ADBE1446	Adbe1446 Rat gene
c 822	16	2.5	146	2	AAE26736	AAE26736 Canine he	c 879	16	2.5	345	9	ADD46059	Add46059 Rat gene
c 823	16	2.5	178	8	ACH16857	ACH16857 Human edu	c 880	16	2.5	345	9	ADBE1445	Adbe1445 Rat gene
c 824	16	2.5	189	7	ACF74816	ACF74816 Staphyloc	c 881	16	2.5	345	9	ADBE1447	Adbe1447 Rat gene
c 825	16	2.5	196	4	AA556486	AA556486 Human cDN	c 882	16	2.5	345	9	ADBE1448	Adbe1448 Rat gene
c 826	16	2.5	198	2	AAV87225	AAV87225 EST clone	c 883	16	2.5	347	5	ABV16968	Abv16968 Human ner
c 827	16	2.5	225	2	AAV99646	AAV99646 Nucleic a	c 884	16	2.5	348	5	ABV12142	Abv12142 Human ner
c 828	16	2.5	225	7	ACA52695	ACA52695 Prokaryot	c 885	16	2.5	348	7	ACA30532	Acc30532 Prokaryot
c 829	16	2.5	226	6	AB208439	AB208439 Human leu	c 886	16	2.5	349	3	AACT18144	Aact18144 Human sec
c 830	16	2.5	232	4	AA123177	AA123177 Human bre	c 887	16	2.5	350	3	AACT02828	Aact02828 Human sec
c 831	16	2.5	239	4	ABV74090	ABV74090 Human foe	c 888	16	2.5	351	4	AAH11840	Aah11840 Human cDN
c 832	16	2.5	239	4	AA154543	AA154543 Probe #23	c 889	16	2.5	352	2	AAV86403	Aav86403 EST clone
c 833	16	2.5	239	4	AAK48713	AAK48713 Human bon	c 890	16	2.5	352	5	AAV03304	AAV03304 Human pro
c 834	16	2.5	239	4	AAK22546	AAK22546 Human bra	c 891	16	2.5	353	5	ABV12473	Abv12473 Human pro
c 835	16	2.5	239	4	AB548391	AB548391 Human liv	c 892	16	2.5	356	2	AAV07448	AAV07448 Rana temp
c 836	16	2.5	239	6	AB522435	AB522435 Human gen	c 893	16	2.5	358	7	ABV53943	Abv53943 Bovine ES
c 837	16	2.5	251	4	AA116687	AA116687 Human bre	c 894	16	2.5	360	5	ABV00174	Abv00174 Human pro
c 838	16	2.5	252	6	ABV93037	ABV93037 Staphyloc	c 895	16	2.5	371	5	ABV13522	Abv13522 Human pro
c 839	16	2.5	256	4	AA122774	AA122774 Human bre	c 896	16	2.5	372	7	ACF73925	Acf73925 Staphyloc
c 840	16	2.5	256	4	AA125530	AA125530 Human bre	c 897	16	2.5	379	8	ACH42656	Ach42656 Human foe
c 841	16	2.5	257	3	AA031313	AA031313 Human sec	c 898	16	2.5	380	5	AAH94324	Aah94324 Human foe
c 842	16	2.5	257	3	AA029304	AA029304 Human sec	c 899	16	2.5	381	5	ABV48090	Abv48090 Human pro
c 843	16	2.5	267	3	AA029557	AA029557 Human sec	c 900	16	2.5	381	7	ACC60361	Acc60361 Rfco leaf
c 844	16	2.5	276	4	AAK87701	AAK87701 Human dig	c 901	16	2.5	381	7	ABV55971	Abv55971 Bovine ES
c 845	16	2.5	276	5	AA531685	AA531685 Human liv	c 902	16	2.5	392	9	ADD32296	Add32296 Human mit
c 846	16	2.5	276	6	ABN90040	ABN90040 Human liv	c 903	16	2.5	393	2	AA060281	Aa060281 Staphyloc
c 847	16	2.5	279	7	ACF70609	ACF70609 Phototrab	c 904	16	2.5	393	2	AA020106	AA020106 Enterococ
c 848	16	2.5	285	6	ABO69802	ABO69802 Listeria	c 905	16	2.5	393	3	AAZ24204	Aaz24204 S. aureus
c 849	16	2.5	285	6	ABO698128	ABO698128 Listeria	c 906	16	2.5	393	6	ABN98091	Abn98091 E. faecali
c 850	16	2.5	291	4	AAU07784	AAU07784 Human bre	c 907	16	2.5	393	7	ACA88055	Acc88055 E. faecal
c 851	16	2.5	295	2	AAV83344	AAV83344 Breast ca	c 908	16	2.5	393	7	ABX61661	Abx61661 Enterococ
c 852	16	2.5	295	2	AAV68885	AAV68885 DNA molec	c 909	16	2.5	394	6	ABN94955	Abn94955 Gene #145
c 853	16	2.5	295	6	AA080867	AA080867 Human bre	c 910	16	2.5	396	5	ABV33613	Abv33613 Human pro
c 854	16	2.5	295	6	AA599713	AA599713 Breast tu	c 911	16	2.5	396	5	ABV42530	Abv42530 Human pro
c 855	16	2.5	295	7	ABK46757	ABK46757 Human bre	c 912	16	2.5	396	5	AAH94171	Aah94171 Human foe
c 856	16	2.5	295	7	ADN11234	ADN11234 Human bre	c 913	16	2.5	400	6	ABN64491	Abn64491 Human can
c 857	16	2.5	295	9	ADC15207	ADC15207 Human bre	c 914	16	2.5	401	3	AAZ80099	Aaz80099 Human col
c 858	16	2.5	297	3	AA067904	AA067904 Human sec	c 915	16	2.5	406	5	ABV59997	Abv59997 Human pro
c 859	16	2.5	307	2	AA067904	AA067904 Cotton fi	c 916	16	2.5	406	7	ABV64539	Abv64539 Human gen
c 860	16	2.5	307	2	AA087083	AA087083 Sea Islan	c 917	16	2.5	408	4	AA542132	Aa542132 Genomic s
c 861	16	2.5	307	2	AA063667	AA063667 B8 cotton	c 918	16	2.5	408	4	AA187038	Aa187038 Human pol
c 862	16	2.5	307	2	AAV03953	AAV03953 Geosyplum	c 919	16	2.5	408	5	ABV34637	Abv34637 Human pro

920	16	2.5	409	5	ABV15552	Abv15552 Human pro
c 921	16	2.5	411	4	AAK7062	AAK7062 Human imm
c 922	16	2.5	411	4	AAK7063	AAK7063 Human imm
c 923	16	2.5	411	4	AAI18127	AAI18127 Human pol
c 924	16	2.5	413	7	ACA14166	ACA14166 Proteorct
c 925	16	2.5	415	4	AB118027	AB118027 Drosophila
c 926	16	2.5	415	5	AAH87801	AAH87801 Peptostrept
c 927	16	2.5	415	8	ACH49586	ACH49586 Human leu
c 928	16	2.5	417	3	AAH30913	AAH30913 Human col
c 929	16	2.5	417	6	ABN91954	ABN91954 Stephyloc
c 930	16	2.5	419	8	ACH49434	ACH49434 Human leu
c 931	16	2.5	421	7	ABK52890	ABK52890 Bovine ES
c 932	16	2.5	422	2	AAK39882	AAK39882 Expressed
c 933	16	2.5	422	2	AAK39304	AAK39304 Human bra
c 934	16	2.5	428	5	ABV04353	ABV04353 Human imm
c 935	16	2.5	429	4	AAK74755	AAK74755 Human imm
c 936	16	2.5	429	7	ACA21871	ACA21871 Proteorct
c 937	16	2.5	430	6	ABV83644	ABV83644 Human bre
c 938	16	2.5	434	5	ABAI1337	ABAI1337 Human ner
c 939	16	2.5	435	3	AAK88403	AAK88403 Rice geno
c 940	16	2.5	435	3	AAK87198	AAK87198 Rice EPS
c 941	16	2.5	435	3	AAK89327	AAK89327 Rice geno
c 942	16	2.5	437	5	ABAI16674	ABAI16674 Human ner
c 943	16	2.5	438	5	ABAI13795	ABAI13795 Human ner
c 944	16	2.5	444	7	ABK07983	ABK07983 S. pneumo
c 945	16	2.5	444	7	ACF73774	ACF73774 Stephyloc
c 946	16	2.5	446	4	AAK32985	AAK32985 Human bon
c 947	16	2.5	446	4	AAI187510	AAI187510 Human pol
c 948	16	2.5	446	4	AAK06864	AAK06864 Human bra
c 949	16	2.5	446	4	ABK32296	ABK32296 Human liv
c 950	16	2.5	446	6	ABK07374	ABK07374 Human gen
c 951	16	2.5	447	7	ABK45796	ABK45796 Bovine ES
c 952	16	2.5	448	4	AAI186534	AAI186534 Human pol
c 953	16	2.5	448	5	ABV57496	ABV57496 Human pro
c 954	16	2.5	449	6	ABK91769	ABK91769 DNA encod
c 955	16	2.5	449	8	ACH15987	ACH15987 Human fce
c 956	16	2.5	452	4	ABK56642	ABK56642 Human fce
c 957	16	2.5	452	4	ABK46094	ABK46094 Human bre
c 958	16	2.5	452	4	ABK26249	ABK26249 Human bre
c 959	16	2.5	452	4	AAK30302	AAK30302 Human bon
c 960	16	2.5	452	4	AAK04780	AAK04780 Human bra
c 961	16	2.5	453	5	AAI04684	AAI04684 Probe #46
c 962	16	2.5	453	5	AAH88048	AAH88048 Peptostrept
c 963	16	2.5	453	6	ABK76271	ABK76271 Human ORF
c 964	16	2.5	456	8	ACH25736	ACH25736 Human exc
c 965	16	2.5	459	4	AAI199190	AAI199190 Human kid
c 966	16	2.5	459	5	AAI163540	AAI163540 Human fce
c 967	16	2.5	462	8	ACH17965	ACH17965 Human fce
c 968	16	2.5	466	8	ACH26191	ACH26191 Human adu
c 969	16	2.5	467	3	AAH81560	AAH81560 N. mening
c 970	16	2.5	472	8	ACH41782	ACH41782 Human fce
c 971	16	2.5	473	8	ACH25589	ACH25589 Human fce
c 972	16	2.5	478	8	ACH45179	ACH45179 Human fce
c 973	16	2.5	480	8	ACH25709	ACH25709 Human adu
c 974	16	2.5	486	8	ACH25069	ACH25069 Human adu
c 975	16	2.5	486	9	ADD20336	ADD20336 Oreochrom
c 976	16	2.5	486	9	ADD20342	ADD20342 Oreochrom

c 977	16	2.5	487	9	ADE81991	Ade81991 Arabidops
c 978	16	2.5	489	4	AAE17635	AAE17635 Human bre
c 979	16	2.5	489	4	AAE47065	AAE47065 Human bre
c 980	16	2.5	489	6	ABK95100	ABK95100 Human bre
c 981	16	2.5	489	6	ABT08720	ABT08720 Human bre
c 982	16	2.5	489	6	ABK56366	ABK56366 Human bre
c 983	16	2.5	489	7	ABT32878	ABT32878 Human tum
c 984	16	2.5	489	10	ADE44072	ADE44072 Human cDN
c 985	16	2.5	494	4	AAK55617	AAK55617 Human imm
c 986	16	2.5	495	5	ABV39043	ABV39043 Human pro
c 987	16	2.5	495	5	ABV44871	ABV44871 Human pro
c 988	16	2.5	496	4	AAK88974	AAK88974 Human dig
c 989	16	2.5	496	5	AAK31843	AAK31843 Human liv
c 990	16	2.5	496	6	ABN90198	ABN90198 Human liv
c 991	16	2.5	501	9	ACF73041	ACF73041 Stephyloc
c 992	16	2.5	501	9	ADE81627	ADE81627 Arabidops
c 993	16	2.5	503	6	ABK51767	ABK51767 Oligonuc
c 994	16	2.5	503	6	ABK51766	ABK51766 Oligonuc
c 995	16	2.5	507	6	ABK27076	ABK27076 Oligonuc
c 996	16	2.5	507	6	ABK27077	ABK27077 Oligonuc
c 997	16	2.5	507	6	ABK46036	ABK46036 Oligonuc
c 998	16	2.5	507	6	ABK46037	ABK46037 Oligonuc
c 999	16	2.5	507	6	ABK78447	ABK78447 Bacillus
1000	16	2.5	507	7	ABT40677	ABT40677 Toxicity

# ALIGNMENTS

RESULT 1						
ID	AAA68249	standard;	DNA;	651	BP.	
AC	AAA68249;					
XX						
DT	15-SEP-2003	(revised)				
DT	05-AUG-2003	(revised)				
DT	27-OCT-2000	(first entry)				
DE	Bacteriophage 77 77ORF019 nucleotide sequence.					
XX						
XX	Bacteriophage; antimicrobial; genome; identification; antibacterial;					
KW	bacterial growth inhibition; bacterial infection; ds.					
OS	Staphylococcus aureus; bacteriophage 77.					
PN	WO200032825-A2.					
PD	08-JUN-2000.					
PF	03-DEC-1999; 99WO-18002040.					
PR	03-DEC-1998; 98US-0110992P.					
PR	28-SEP-1999; 99US-00407804.					
PR	30-SEP-1999; 99US-0157218P.					
PR	01-DEC-1999; 99US-0168777P.					

PR 02-DEC-1999; 99US-00454252.  
XX  
XX (PHAG-) PHAGETECH INC.  
XX  
XX  
PI Pelletier J, Gros P, Dubow M;  
XX  
XX WPI; 2000-412361/35.  
DR P-PSDB; AAB16524.  
XX  
XX  
PT Identifying a bacteriophage coding region for treating bacterial  
infections comprises identifying a nucleic acid encoding a product that  
inhibits bacteria when a bacteriophage infects a bacterium.  
XX  
XX  
PS Disclosure: Page 155; 456pp; English.  
XX  
XX The present invention describes a method for identifying a bacteriophage  
coding region encoding a product active on an essential bacterial target.  
CC The method comprises identifying a nucleic acid sequence encoding a gene  
product that provides a bacteria-inhibiting function when an  
CC uncharacterised bacteriophage infects a pathogenic bacterium. The  
CC compound active on a target of a bacteriophage inhibitor protein in a  
CC bacteria is used to treat or prevent a bacterial infection in an animal.  
CC AAB68243 to AAB69442 and AAB16523 to AAB16954 represent bacteriophage  
CC nucleotide and protein sequences which are used in the exemplification of  
CC the present invention. (Updated on 06-AUG-2003 to correct 05 field.)  
CC (Updated on 15-SEP-2003 to standardise 05 field)  
XX  
XX  
SQ Sequence 651 BP; 275 A; 57 C; 95 G; 224 T; 0 U; 0 Other;  
  
Query Match 100.0%; Score 651; DB 3; Length 651;  
Best Local Similarity 100.0%; Pred. No. 9.2e-271;  
Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 ATGACGACGAAATATATAGAGCATATATATCTTAGCAGAGAGTGTGCTTTATCA 60  
DB 1 ATGACGACGAAATATATAGAGCATATATATCTTAGCAGAGAGTGTGCTTTATCA 60  
QY 61 GTTAAAGATTTTATGATTTTACAGATCTTAACTACACGTTAAAAATCAATTTA 120  
DB 61 GTTAAAGATTTTATGATTTTACAGATCTTAACTACACGTTAAAAATCAATTTA 120  
QY 121 GACCAATATATCGATATATTTAGATTGTTTAAAAAGCTAAAAAGATTTGGAGCT 180  
DB 121 GACCAATATATCGATATATTTAGATTGTTTAAAAAGCTAAAAAGATTTGGAGCT 180  
QY 181 TATATTTATTCACAGACGATGAAATTTTAAATTTTGTATTTGAATGCTTTAT 240  
DB 181 TATATTTATTCACAGACGATGAAATTTTAAATTTTGTATTTGAATGCTTTAT 240  
QY 241 AATTGATTAAGCAAGTAAAAAGCTATGAAATGTTATTTGATTTAGCAATGATT 300  
DB 241 AATTGATTAAGCAAGTAAAAAGCTATGAAATGTTATTTGATTTAGCAATGATT 300  
QY 301 AATTTCAAATAGAGTTAAAGCAATGAAAGTTTAAAGAGTTTCAACATGAATT 360  
DB 301 AATTTCAAATAGAGTTAAAGCAATGAAAGTTTAAAGAGTTTCAACATGAATT 360

QY 361 AGTACAAATCAGATTTTAAATCCTCTTTGTATGAAACAATGCTATTATAT 420  
DB 361 AGTACAAATCAGATTTTAAATCCTCTTTGTATGAAACAATGCTATTATAT 420  
QY 421 GAATATCAAAAAGATATCTTATTTAAAAATATATTAATTAATGAAATGA 480  
DB 421 GAATATCAAAAAGATATCTTATTTAAAAATATTAATTAATGAAATGA 480  
QY 481 GCTTATATCATATTTGATTTTATCATCTCAGAGTACCGAGAAAATTAACGATTAT 540  
DB 481 GCTTATATCATATTTGATTTTATCATCTCAGAGTACCGAGAAAATTAACGATTAT 540  
QY 541 AATCTTATCTGATTAATTTGAAGAACGTTAGTCAAAAAGTTAAATTAACGAACT 600  
DB 541 AATCTTATCTGATTAATTTGAAGAACGTTAGTCAAAAAGTTAAATTAACGAACT 600  
QY 601 TCGATTAAGAAAGATTTATTTATTTAAACAGAGGATTTAAATGA 651  
DB 601 TCGATTAAGAAAGATTTATTTATTTAAACAGAGGATTTAAATGA 651  
  
RESULT 2  
ID AAB68247 standard; DNA; 41708 BP.  
AC AAB68247;  
XX  
XX  
DT 15-SEP-2003 (revised)  
DT 06-AUG-2003 (revised)  
DT 27-OCT-2000 (first entry)  
XX  
XX  
DE Bacteriophage 77 complete genome sequence.  
XX  
XX  
KW Bacteriophage; antimicrobial; genome; identification; antibacterial;  
bacterial growth inhibition; bacterial infection; ds.  
OS Staphylococcus aureus; bacteriophage 77.  
XX  
XX  
PN WO200032825-A2.  
XX  
XX  
PD 08-JUN-2000.  
XX  
XX  
PE 03-DEC-1999; 99WO-1B002040.  
XX  
XX  
PR 03-DEC-1999; 99US-0110992P.  
PR 03-JUN-1999; 99US-00326144.  
PR 28-SEP-1999; 99US-00407804.  
PR 30-SEP-1999; 99US-0157218P.  
PR 01-DEC-1999; 99US-0168777P.  
PR 02-DEC-1999; 99US-00454252.  
XX  
XX  
PA (PHAG-) PHAGETECH INC.  
XX  
XX  
PI Pelletier J, Gros P, Dubow M;  
XX  
XX WPI; 2000-412361/35.  
XX



PT Identifying a bacteriophage coding region for treating bacterial  
PT infections comprises identifying a nucleic acid encoding a product that  
XX inhibits bacteria when a bacteriophage infects a bacterium.  
XX  
XX Example 3; Page 141-151; 456pp; English.

XX The present invention describes a method for identifying a bacteriophage  
CC coding region encoding a product active on an essential bacterial target.  
CC The method comprises identifying a nucleic acid sequence encoding a gene  
CC product that provides a bacteria-inhibiting function when an  
CC uncharacterized bacteriophage infects a pathogenic bacterium. The  
CC compound is used on a target of a bacteriophage inhibitor protein in a  
CC bacteria to treat or prevent a bacterial infection in an animal.  
CC AA668243 to AA69442 and AB16523 to AB16954 represent bacteriophage  
CC nucleotide and protein sequences which are used in the exemplification of  
CC the present invention. (Updated on 06-AUG-2003 to correct OS field.)  
XX (Updated on 15-SEP-2003 to standardise OS field)

XX Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 U; 0 Other;

Query Match 100.0%; Score 651; DB 3; Length 41708;  
Best Local Similarity 100.0%; Pred. No. 6.9e-271;  
Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 ATGACGACCAATTAATAGGACATATATACCTTAGCAGAGGTGTGCTTATCA 60  
DB 39851 ATGACGACCAATTAATAGGACATATATACCTTAGCAGAGGTGTGCTTATCA 39910  
OY 61 GTTAAAGATTTTACGTAATTTTACAGATCTAACTACAGATTAATTAATCAATTA 120  
DB 39911 GTTAAAGATTTTACGTAATTTTACAGATCTAACTACAGATTAATTAATCAATTA 39970  
OY 121 GACCAATATATCCGATATATTTAGATTGTTTAAAGGCTAAAGAGATTGGAGCT 180  
DB 39971 GACCAATATATCCGATATATTTAGATTGTTTAAAGGCTAAAGAGATTGGAGCT 40030  
OY 181 TATATTATCCAGACGACGATGATTTTATGATTTTATGATTTGAAATGCTTTAAT 240  
DB 40031 TATATTATCCAGACGACGATGATTTTATGATTTTATGATTTGAAATGCTTTAAT 40090  
OY 241 AATTAGATAGCAAGTAAAGGCTATGAAATGTTATGATTTAGCAATGAT 300  
DB 40091 AATTAGATAGCAAGTAAAGGCTATGAAATGTTATGATTTAGCAATGAT 40150  
OY 301 AATTATCAAAATAGATTAAGCAATGAAAGTTTAAAGTGAGTTCAACATGATTT 360  
DB 40151 AATTATCAAAATAGATTAAGCAATGAAAGTTTAAAGTGAGTTCAACATGATTT 40210  
OY 361 AGTACCAATCAGATTTTATTCCTCTTTGTTATGAAACAAATGCTATTAAAT 420  
DB 40211 AGTACCAATCAGATTTTATTCCTCTTTGTTATGAAACAAATGCTATTAAAT 40270  
OY 421 GAATATCAAAAGATATATCTATTAAATTAATTAATTAATTAATTAATTAATTAAT 480  
DB 40271 GAATATCAAAAGATATATCTATTAAATTAATTAATTAATTAATTAATTAATTAAT 40330  
OY 481 GCTTATATCATATGATGTTTATCACTCAGAGTACCGAGCAAAATTAACGATTAT 540

DB 40331 GCTTATATCATATGATGTTTATCACTCAGAGTACCGAGCAAAATTAACGATTAT 40390  
OY 541 ATCTTATCTGATTAATTTGAAGACGTTAGTCAAAAGTTAAATTAACGAACT 600  
DB 40391 ATCTTATCTGATTAATTTGAAGACGTTAGTCAAAAGTTAAATTAACGAACT 40450  
OY 601 TCGATTAAGAAAGATTTATTTATTAATTTAAACAGAGATTTAAATGA 651  
DB 40451 TCGATTAAGAAAGATTTATTTATTAATTTAAACAGAGATTTAAATGA 40501

RESULT 3

AAC86106  
ID AAC86106 standard; cDNA; 41708 BP.  
XX  
XX AAC86106;  
AC  
XX  
XX  
XX

DT 06-AUG-2003 (revised)  
DT 29-AUG-2001 (first entry)  
XX  
XX  
XX

DE Complete genome of bacteriophage 77.  
XX  
XX  
XX

XX DnaI; S. aureus; inhibitor; bacteriophage 77; ORF 104; phage 77ORF104;  
XX screening assay; ss.  
XX  
XX  
XX

OS Bacteriophage.  
XX  
XX  
XX

PN WO200146383-A2.  
PD 28-JUN-2001.  
XX  
XX  
XX

PE 21-DEC-2000; 2000WO-US035180.  
XX  
XX  
XX

PR 22-DEC-1999; 99US-00470512.  
PR 12-OCT-2000; 2000US-00689952.  
XX  
XX  
XX

PA (PHAG-) PHAGETECH INC.  
PA (WILLI) WILLIAMS K M.  
XX  
XX  
XX

PI Pelletier J, Gros P, Dubow M;  
XX  
XX  
XX

DR WPI; 2001-418052/44.  
XX  
XX  
XX

PT Novel DnaI polypeptides useful for treating and diagnosing microbial,  
PT preferably bacterial, diseases such as those caused by Staphylococcus  
XX aureus.  
XX  
XX

PS Disclosure; Fig 2; 107pp; English.  
XX  
XX  
XX

CC This sequence represents the genome of Bacteriophage 77. The growth  
CC inhibitory gene product of ORF 104 interacts with DnaI derived from S.  
CC aureus, to form the basis of a screening assay. DnaI polypeptides and  
CC polynucleotides are useful for treating microbial, preferably bacterial,  
CC especially Staphylococcal, infections. DnaI polypeptides and  
CC polynucleotides are useful for biological, diagnostic, prophylactic,  
CC clinical and therapeutic use, and as components in databases useful for

**SQ Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 U; 0 Other;**

Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 40451 TCGATAAAGAAGATTATTATTAACTTAACAAGAGAGATTAAATGA 40501

Job time : 468.29 secs

OM nucleic - nucleic search, using SW model

6389.277 Million cell updates/sec

Sequence: 1 atgaaacgacaaataaataagg...acaaagagagatcttaaatgaa 651

Gapop 60.0 , Gapext 60.0

Word size : 0

total number of hits satisfying chosen parameters: 55026578

Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database

1	EST:	
2	em_estbda:*	
3	em_esthnum:*	
4	em_estltn:*	
5	em_estm:*	
6	em_estvca:*	
7	em_estpdl:*	
8	em_estvco:*	
9	em_estc:*	
10	gb_est1:*	
11	gb_estc:*	
12	gb_estc1:*	
13	gb_estc2:*	
14	gb_estc3:*	
15	em_estfnum:*	
16	em_estfnum:*	
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25	em_estnum:*	
26	em_estnum:*	
27	em_estnum:*	

28: qb\_gses1:~  
29: qb\_gses2:~

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the total score being printed, and is derived by analysis of the score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	24	3.7	471	29	AG243044	AG243044 Lotus cor
2	24	3.7	621	12	BH162873	BH162873 EST565396
3	24	3.7	688	29	CG185633	CG185633 PUICP69TD
4	24	3.7	824	28	B2728378	B2728378 OGECR29TC
5	24	3.7	848	29	CG296548	CG296548 OGIBCI11TH
6	23	3.5	300	10	BF779194	BF779194 3106-34 h
7	23	3.5	596	29	CG154431	CG154431 t1gr-gsa-
8	22	3.4	443	28	AG036675	AG036675 CIT-HSP-2
9	22	3.4	495	28	AG036800	AG036800 HS_5358.B
10	22	3.4	531	12	BM273373	BM273373 PFE5Tca4
11	22	3.4	580	14	CD077038	CD077038 MA3-000IU
12	22	3.4	639	29	CG158238	CG158238 PUTB005TE
13	22	3.4	709	28	BH980591	BH980591 cda11504.
14	22	3.4	719	13	BK310093	BK310093 BX310093
15	22	3.4	745	28	CC168679	CC168679 1J85h10.9
16	22	3.4	757	12	BM170268	BM170268 EST572791
17	21	3.2	99	9	AA485711	AA485711 ab10940.x
18	21	3.2	190	9	AI688140	AI688140 MB83910.x
19	21	3.2	205	12	BM666504	BM666504 UT-E-COI-
20	21	3.2	370	14	CB852711	CB852711 UT-CF-FNO
21	21	3.2	403	28	AG062480	AG062480 HS_2128.A
22	21	3.2	415	10	BE932045	BE932045 CM2-NT016
23	21	3.2	463	28	B2698220	B2698220 PUBWV41TD
24	21	3.2	463	28	B2701482	B2701482 PUBWV41TD
25	21	3.2	511	28	AG012488	AG012488 CIT-HSP-2
26	21	3.2	511	29	AG235001	AG235001 Lotus cor
27	21	3.2	660	29	BK167829	BK167829 Daulto rer
28	21	3.2	665	28	AG310475	AG310475 IM0025N23
29	21	3.2	673	29	AG036854	AG036854 Pan trogl
30	21	3.2	675	28	BH001460	BH001460 BMAC0180
31	21	3.2	717	12	BM169216	BM169216 EST571739
32	21	3.2	717	12	BM940220	BM940220 UT-H-CGDP
33	21	3.2	735	29	CC866757	CC866757 ND.L13219
34	21	3.2	855	14	CD171657	CD171657 AGENCOURT
35	21	3.2	875	28	BH159742	BH159742 ENTRB76TR
36	21	3.2	891	13	BUI59551	BUI59551 AGENCOURT
37	21	3.2	891	29	CG114269	CG114269 PUWDC84TD
38	21	3.2	901	28	AG267579	AG267579 ENTRB22TF
39	21	3.2	939	28	BH134383	BH134383 ENTRC12TR
40	21	3.2	940	28	BH130856	BH130856 ENTRF60TR
41	21	3.2	948	28	CG114266	CG114266 PUWDC84TD
42	21	3.2	949	28	AG684730	AG684730 ENTRV47TF
43	21	3.2	1015	12	BM394551	BM394551 50072-2-4
44	21	3.2	1060	28	CC266828	CC266828 CH261-124
45	21	3.2	1064	29	QMS07B99	AI437586 T3 end of

c 103	20	3.1	496	9	AA910322	AA910322 oK83c03.s	c 160	20	3.1	708	13	BU687141
c 104	20	3.1	497	28	BH650369	BH650369 BOKCH21TF	c 161	20	3.1	712	9	AV854129
c 105	20	3.1	498	28	CC860228	CC860228 NDL.39D22	c 162	20	3.1	712	13	BU201985
c 106	20	3.1	503	14	CA266852	CA266852 SCNRJRT306	c 163	20	3.1	716	9	AV896978
c 107	20	3.1	516	28	AZ462156	AZ462156 1M0269M16	c 164	20	3.1	716	9	AV902615
c 108	20	3.1	517	9	AI581402	AI581402 t071e04.*	c 165	20	3.1	716	13	BO504920
c 109	20	3.1	521	12	BM275695	BM275695 PFE5T0a5	c 166	20	3.1	719	13	BU292823
c 110	20	3.1	523	28	AQ370898	AQ370898 HS_3048_A	c 167	20	3.1	719	29	CE010772
c 111	20	3.1	524	10	AW514968	AW514968 xV01e01.x	c 168	20	3.1	721	14	CB241338
c 112	20	3.1	526	10	AW934532	AW934532 EST353436	c 169	20	3.1	721	28	AO578376
c 113	20	3.1	527	12	BG817799	BG817799 ESSU0221	c 170	20	3.1	722	14	CA438977
c 114	20	3.1	540	10	BF594507	BF594507 7b76a05.x	c 171	20	3.1	732	28	BZ500908
c 115	20	3.1	540	28	AO828809	AO828809 HS_5262_A	c 172	20	3.1	736	13	BU268247
c 116	20	3.1	546	12	BM671574	BM671574 UI-E-CQ1-	c 173	20	3.1	738	28	AO542040
c 117	20	3.1	560	12	BU415023	BU415023 BJ415023	c 174	20	3.1	741	29	BX226352
c 118	20	3.1	562	12	BM852235	BM852235 K-EST0133	c 175	20	3.1	746	9	AV854153
c 119	20	3.1	564	29	CE785209	CE785209 t1qf-gs-	c 176	20	3.1	746	9	AV854165
c 120	20	3.1	581	10	BE673673	BE673673 7d79d02.x	c 177	20	3.1	749	13	BU351749
c 121	20	3.1	583	28	AZ977754	AZ977754 2M0253H15	c 178	20	3.1	772	13	BU331126
c 122	20	3.1	583	28	BZ150679	BZ150679 CH230-492	c 179	20	3.1	776	29	CC896530
c 123	20	3.1	586	14	CB114682	CB114682 K-EST0158	c 180	20	3.1	779	28	BZ743489
c 124	20	3.1	587	12	BM726595	BM726595 UI-E-EJ0-	c 181	20	3.1	786	28	BZ787787
c 125	20	3.1	587	13	BU731541	BU731541 UI-E-C11-	c 182	20	3.1	798	12	B1489318
c 126	20	3.1	588	28	AO503855	AO503855 RPCI-11-3	c 183	20	3.1	801	28	BH115572
c 127	20	3.1	589	12	BG592540	BG592540 EST491218	c 184	20	3.1	816	28	BZ400834
c 128	20	3.1	590	12	BH127330	BH127330 1e97g08.x	c 185	20	3.1	816	28	BZ407739
c 129	20	3.1	594	12	BM681245	BM681245 UI-E-BJ0-	c 186	20	3.1	817	28	BH608020
c 130	20	3.1	602	29	CG277936	CG277936 OG0CC48TH	c 187	20	3.1	817	28	BZ407745
c 131	20	3.1	602	29	CG277948	CG277948 OG0CC48TV	c 188	20	3.1	823	28	BZ806722
c 132	20	3.1	605	9	AA552372	AA552372 nK13a08.s	c 189	20	3.1	824	28	AZ668681
c 133	20	3.1	607	9	AV903320	AV903320 AV903220	c 190	20	3.1	824	28	BH729885
c 134	20	3.1	607	28	CC318313	CC318313 TAM32-22C	c 191	20	3.1	829	12	BE666755
c 135	20	3.1	609	10	BF297344	BF297344 050PbE10	c 192	20	3.1	833	28	BH500790
c 136	20	3.1	617	28	AZ523869	AZ523869 224PB05	c 193	20	3.1	837	28	BH429914
c 137	20	3.1	625	14	CD717228	CD717228 VVB137A02	c 194	20	3.1	843	14	CB197584
c 138	20	3.1	633	28	BH764921	BH764921 BMBA3532E	c 195	20	3.1	844	28	BZ743479
c 139	20	3.1	645	12	BM786403	BM786403 K-EST0065	c 196	20	3.1	845	28	BZ168358
c 140	20	3.1	645	28	AO324710	AO324710 m9K0019H	c 197	20	3.1	850	28	BH709588
c 141	20	3.1	648	10	BF296297	BF296297 035PB04	c 198	20	3.1	855	28	CC373920
c 142	20	3.1	652	28	BH177397	BH177397 009_M_15-	c 199	20	3.1	861	28	AO254724
c 143	20	3.1	652	29	CNS07079	AL614355 T3 end of	c 200	20	3.1	871	29	CG086792
c 144	20	3.1	655	12	BJ411022	BJ411022 BJ411022	c 201	20	3.1	878	28	BZ336148
c 145	20	3.1	656	28	AZ362907	AZ362907 1M0108M08	c 202	20	3.1	881	28	AZ533488
c 146	20	3.1	656	28	AZ526470	AZ526470 255PB011	c 203	20	3.1	882	29	CC713221
c 147	20	3.1	659	13	BU608492	BU608492 UI-CF-FN0	c 204	20	3.1	889	28	AZ674877
c 148	20	3.1	659	28	BZ954444	BZ954444 CH240_128	c 205	20	3.1	894	29	CG960947
c 149	20	3.1	663	12	BJ415038	BJ415038 BJ415038	c 206	20	3.1	906	13	BU243888
c 150	20	3.1	665	29	CG794103	CG794103 ZMMBB031	c 207	20	3.1	912	28	BH135334
c 151	20	3.1	666	29	AG165507	AG165507 Pan tceq1	c 208	20	3.1	916	28	AZ689305
c 152	20	3.1	669	9	AV867854	AV867854 AV867854	c 209	20	3.1	916	28	BH147825
c 153	20	3.1	671	29	AG106328	AG106328 Pan tceq1	c 210	20	3.1	918	28	CD518168
c 154	20	3.1	677	10	BB612297	BB612297 BB612297	c 211	20	3.1	926	14	BO960665
c 155	20	3.1	677	10	BF295950	BF295950 032PB002	c 212	20	3.1	932	13	CG044639
c 156	20	3.1	680	29	AG153330	AG153330 Pan tceq1	c 213	20	3.1	941	29	CG955434
c 157	20	3.1	682	12	BM495300	BM495300 50072-2-B	c 214	20	3.1	954	29	CG955434
c 158	20	3.1	689	28	BH729537	BH729537 BOKKE53TF	c 215	20	3.1	984	29	CNS01VHY
c 159	20	3.1	694	28	BH932985	BH932985 odeb3e03.	c 216	20	3.1	988	29	CNS06GJL8

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AV854129	AV854129
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BO504920	BO504920 EST612335
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CA438977	CA438977 UI-H-D10-
BZ500908	BZ500908 BOKPW6TR
BU268247	BU268247 603820273
AO542040	AO542040 RPCI-11-3
BX226352	BX226352 Danilo rar
AV854153	AV854153 AV854153
AV854165	AV854165 AV854165
BU351749	BU351749 603529350
BU331126	BU331126 603406382
CC896530	CC896530 ZMMBB022
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BZ407739	BZ407739 OGABU21TC
BH608020	BH608020 BOGVS67TF
BZ407745	BZ407745 OGABU21TM
BZ806722	BZ806722 PUNOS67B
AZ668681	AZ668681 ENTBK04TF
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BH500790	BH500790 BOHR190TR
BH429914	BH429914 BOHLE22TR
CB197584	CB197584 AGNOCOURT
BZ743479	BZ743479 OGCB547TC
BZ168358	BZ168358 CH230-514
BH709588	BH709588 BOHTQ36TR
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CG960947	CG960947 MB8HX64TF
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B12623	B12623 F24N21-T7 I
BH147825	BH147825 ENTJ0P59TR
CD518168	CD518168 AGNOCOURT
BO960665	BO960665 AGNOCOURT
CG044639	CG044639 PUBE06TD
CG955434	CG955434 MB8HC27TR
AL169135	AL169135 Tereodon
AL397842	T7 end of

217	c	273	19	2.9	406	28	BH908944	B0884593	AGENCOURT	274	c	275	19	2.9	409	9	A1160741	A1160741	qD49d01.x
218	c	272	19	2.9	405	14	CD102883	AJ314482	Tetracodon	275	c	276	19	2.9	409	13	BW254872	BW254872	BW254872
219	c	271	19	2.9	405	14	CD102883	AJ314486	ES7345790	276	c	277	19	2.9	409	13	BX518203	BX518203	BX518203
220	c	270	19	2.9	404	10	BE654025	CD256342	AGENCOURT	277	c	278	19	2.9	411	9	A1825762	A1825762	BX18203
221	c	269	19	2.9	403	13	BX516967	B0838689	AGENCOURT	278	c	279	19	2.9	412	29	CE433057	CE433057	CE433057
222	c	268	19	2.9	402	10	AM824829	AM898646	RC1-NN007	279	c	280	19	2.9	413	12	BG454241	BG454241	CE433057
223	c	267	19	2.9	400	14	CF424829	BE15908	QVO-HR036	280	c	281	19	2.9	414	10	BB688826	BB688826	BB688826
224	c	266	19	2.9	400	14	CF424829	BE15908	QVO-HR036	281	c	282	19	2.9	414	10	BB688826	BB688826	BB688826
225	c	265	19	2.9	396	10	BE851292	BE15908	QVO-HR036	282	c	283	19	2.9	417	9	AA976542	AA976542	on35a04.s
226	c	264	19	2.9	396	10	BE851292	BE15908	QVO-HR036	283	c	284	19	2.9	418	14	CA885168	CA885168	AU226809
227	c	263	19	2.9	390	9	A1710857	BE15908	QVO-HR036	284	c	285	19	2.9	418	14	CA885168	CA885168	AU226809
228	c	262	19	2.9	389	14	CF367610	BE15908	QVO-HR036	285	c	286	19	2.9	419	10	BB711915	BB711915	BB711915
229	c	261	19	2.9	389	14	CF367610	BE15908	QVO-HR036	286	c	287	19	2.9	420	10	BB711915	BB711915	BB711915
230	c	260	19	2.9	389	14	CF367610	BE15908	QVO-HR036	287	c	288	19	2.9	424	14	CD422238	CD422238	laa76g02.
231	c	259	19	2.9	381	28	AZ440587	BE15908	QVO-HR036	288	c	289	19	2.9	424	14	CF927205	CF927205	CF927205
232	c	258	19	2.9	379	29	AG256059	BE15908	QVO-HR036	289	c	290	19	2.9	424	28	AQ699804	AQ699804	HS_5223.A
233	c	257	19	2.9	379	29	AG256059	BE15908	QVO-HR036	290	c	291	19	2.9	427	14	CB047967	CB047967	CB047967
234	c	256	19	2.9	379	29	AG256059	BE15908	QVO-HR036	291	c	292	19	2.9	431	14	CF423619	CF423619	laa76g02.
235	c	255	19	2.9	379	29	AG256059	BE15908	QVO-HR036	292	c	293	19	2.9	433	14	CF380906	CF380906	CF380906
236	c	254	19	2.9	379	29	AG256059	BE15908	QVO-HR036	293	c	294	19	2.9	434	14	CF423899	CF423899	CF423899
237	c	253	19	2.9	379	29	AG256059	BE15908	QVO-HR036	294	c	295	19	2.9	438	28	BH616043	BH616043	BH616043
238	c	252	19	2.9	379	29	AG256059	BE15908	QVO-HR036	295	c	296	19	2.9	439	9	A1341579	A1341579	qR92e03.x
239	c	251	19	2.9	379	29	AG256059	BE15908	QVO-HR036	296	c	297	19	2.9	439	28	AZ885652	AZ885652	UT-M-GMO-
240	c	250	19	2.9	379	29	AG256059	BE15908	QVO-HR036	297	c	298	19	2.9	441	10	BE030178	BE030178	BE030178
241	c	249	19	2.9	379	29	AG256059	BE15908	QVO-HR036	298	c	299	19	2.9	441	10	BE030178	BE030178	BE030178
242	c	248	19	2.9	379	29	AG256059	BE15908	QVO-HR036	299	c	300	19	2.9	442	14	CF805048	CF805048	CF805048
243	c	247	19	2.9	379	29	AG256059	BE15908	QVO-HR036	300	c	301	19	2.9	444	14	CF355973	CF355973	CF355973
244	c	246	19	2.9	379	29	AG256059	BE15908	QVO-HR036	301	c	302	19	2.9	444	14	CF383491	CF383491	CF383491
245	c	245	19	2.9	379	29	AG256059	BE15908	QVO-HR036	302	c	303	19	2.9	446	9	AA887339	AA887339	nz5b01.s
246	c	244	19	2.9	379	29	AG256059	BE15908	QVO-HR036	303	c	304	19	2.9	446	14	CF381206	CF381206	CF381206
247	c	243	19	2.9	379	29	AG256059	BE15908	QVO-HR036	304	c	305	19	2.9	447	14	CD644872	CD644872	laa76g02.
248	c	242	19	2.9	379	29	AG256059	BE15908	QVO-HR036	305	c	306	19	2.9	449	28	B2957488	B2957488	B2957488
249	c	241	19	2.9	379	29	AG256059	BE15908	QVO-HR036	306	c	307	19	2.9	450	9	AA975236	AA975236	qR36c10.s
250	c	240	19	2.9	379	29	AG256059	BE15908	QVO-HR036	307	c	308	19	2.9	450	14	CF383801	CF383801	CF383801
251	c	239	19	2.9	379	29	AG256059	BE15908	QVO-HR036	308	c	309	19	2.9	451	28	AZ216392	AZ216392	Shattered.D
252	c	238	19	2.9	379	29	AG256059	BE15908	QVO-HR036	309	c	310	19	2.9	454	9	AM019434	AM019434	AM019434
253	c	237	19	2.9	379	29	AG256059	BE15908	QVO-HR036	310	c	311	19	2.9	454	28	AQ109899	AQ109899	CIT-HSP-2
254	c	236	19	2.9	379	29	AG256059	BE15908	QVO-HR036	311	c	312	19	2.9	462	14	CF353960	CF353960	laa76g02.
255	c	235	19	2.9	379	29	AG256059	BE15908	QVO-HR036	312	c	313	19	2.9	464	10	BE463580	BE463580	BE463580
256	c	234	19	2.9	379	29	AG256059	BE15908	QVO-HR036	313	c	314	19	2.9	464	12	BG178824	BG178824	BG178824
257	c	233	19	2.9	379	29	AG256059	BE15908	QVO-HR036	314	c	315	19	2.9	466	9	AA423335	AA423335	AA423335
258	c	232	19	2.9	379	29	AG256059	BE15908	QVO-HR036	315	c	316	19	2.9	467	9	AA034951	AA034951	AA034951
259	c	231	19	2.9	379	29	AG256059	BE15908	QVO-HR036	316	c	317	19	2.9	468	9	AA955579	AA955579	AA955579
260	c	230	19	2.9	379	29	AG256059	BE15908	QVO-HR036	317	c	318	19	2.9	468	10	BF111133	BF111133	BF111133
261	c	229	19	2.9	379	29	AG256059	BE15908	QVO-HR036	318	c	319	19	2.9	470	12	EM310063	EM310063	EM310063
262	c	228	19	2.9	379	29	AG256059	BE15908	QVO-HR036	319	c	320	19	2.9	472	12	EM230022	EM230022	EM230022
263	c	227	19	2.9	379	29	AG256059	BE15908	QVO-HR036	320	c	321	19	2.9	480	10	BF602296	BF602296	BF602296
264	c	226	19	2.9	379	29	AG256059	BE15908	QVO-HR036	321	c	322	19	2.9	481	12	BM155273	BM155273	BM155273
265	c	225	19	2.9	379	29	AG256059	BE15908	QVO-HR036	322	c	323	19	2.9	481	28	AZ144093	AZ144093	SP_0009.B
266	c	224	19	2.9	379	29	AG256059	BE15908	QVO-HR036	323	c	324	19	2.9	489	28	AQ917412	AQ917412	T233441b
267	c	223	19	2.9	379	29	AG256059	BE15908	QVO-HR036	324	c	325	19	2.9	489	28	AQ917412	AQ917412	T233441b
268	c	222	19	2.9	379	29	AG256059	BE15908	QVO-HR036	325	c	326	19	2.9	490	14	CK233836	CK233836	CK233836
269	c	221	19	2.9	379	29	AG256059	BE15908	QVO-HR036	326	c	327	19	2.9	491	28	BZ588445	BZ588445	laa76g02.
270	c	220	19	2.9	379	29	AG256059	BE15908	QVO-HR036	327	c	328	19	2.9	491	28	BZ588445	BZ588445	laa76g02.
271	c	219	19	2.9	379	29	AG256059	BE15908	QVO-HR036	328	c	329	19	2.9	494	28	AQ691539	AQ691539	HS_5369.A
272	c	218	19	2.9	379	29	AG256059	BE15908	QVO-HR036	329	c	330	19	2.9	495	28	AZ816615	AZ816615	2M0065M24
273	c	217	19	2.9	379	29	AG256059	BE15908	QVO-HR036	330	c	331	19	2.9	495	28	AZ816615	AZ816615	2M0065M24

331	19	2.9	502	29	BX140474	388	19	2.9	597	28	BZ506214	BZ506214
332	19	2.9	503	9	AT188669	389	19	2.9	600	10	BF966137	BF966137
333	19	2.9	503	28	AQ157661	390	19	2.9	600	13	BU919204	BU919204
334	19	2.9	505	14	CF599758	391	19	2.9	600	28	BZ401000	BZ401000
335	19	2.9	509	12	AV523320	392	19	2.9	601	28	AO059872	AO059872
336	19	2.9	509	12	BT451111	393	19	2.9	602	13	BU307497	BU307497
337	19	2.9	512	14	NS4189	394	19	2.9	604	14	CB400786	CB400786
338	19	2.9	515	10	BE370242	395	19	2.9	607	9	AL969690	AL969690
339	19	2.9	516	28	AQ776641	396	19	2.9	607	28	BZ403068	BZ403068
340	19	2.9	517	10	AF696017	397	19	2.9	607	28	CE492012	CE492012
341	19	2.9	520	14	CF600262	398	19	2.9	608	13	BU345563	BU345563
342	19	2.9	521	28	BZ859250	399	19	2.9	608	13	BU345563	BU345563
343	19	2.9	522	28	AZ851361	400	19	2.9	612	28	AQ521262	AQ521262
344	19	2.9	523	10	AM691654	401	19	2.9	618	28	AQ156640	AQ156640
345	19	2.9	523	12	BM730156	402	19	2.9	622	13	BU607536	BU607536
346	19	2.9	524	9	AL680061	403	19	2.9	633	9	AV869625	AV869625
347	19	2.9	525	29	CG407858	404	19	2.9	633	28	BZ403058	BZ403058
348	19	2.9	527	12	BM781214	405	19	2.9	633	28	BZ403058	BZ403058
349	19	2.9	527	14	CF116923	406	19	2.9	637	13	CA051525	CA051525
350	19	2.9	528	9	AM026438	407	19	2.9	639	29	CE717429	CE717429
351	19	2.9	528	29	CE736103	408	19	2.9	640	10	BF308012	BF308012
352	19	2.9	530	28	AZ250223	409	19	2.9	642	14	CB442893	CB442893
353	19	2.9	535	9	AL960807	410	19	2.9	643	13	BQ390010	BQ390010
354	19	2.9	536	10	AW120667	411	19	2.9	644	10	BB630161	BB630161
355	19	2.9	536	28	AZ283624	412	19	2.9	646	29	BX213184	BX213184
356	19	2.9	537	28	AQ438421	413	19	2.9	650	10	AM692470	AM692470
357	19	2.9	539	10	BF062553	414	19	2.9	650	14	CD598441	CD598441
358	19	2.9	540	29	CE365904	415	19	2.9	651	28	BZ398417	BZ398417
359	19	2.9	545	9	AL594516	416	19	2.9	658	10	AM691990	AM691990
360	19	2.9	549	13	BK297104	417	19	2.9	658	12	BG428656	BG428656
361	19	2.9	551	28	AZ740090	418	19	2.9	661	29	AG149784	AG149784
362	19	2.9	552	29	BX153265	419	19	2.9	663	9	AU167028	AU167028
363	19	2.9	553	10	BF057160	420	19	2.9	663	28	BH673870	BH673870
364	19	2.9	553	13	BQ451321	421	19	2.9	664	9	AL649832	AL649832
365	19	2.9	562	28	AZ389303	422	19	2.9	664	28	BH482365	BH482365
366	19	2.9	564	12	BI037229	423	19	2.9	667	13	CA131564	CA131564
367	19	2.9	565	28	BH664543	424	19	2.9	668	29	CE197524	CE197524
368	19	2.9	566	10	BE439425	425	19	2.9	671	10	AM691359	AM691359
369	19	2.9	570	12	BE860408	426	19	2.9	674	10	AM688672	AM688672
370	19	2.9	570	28	AQ768495	427	19	2.9	675	28	BH965397	BH965397
371	19	2.9	571	28	BH716278	428	19	2.9	676	9	AV649631	AV649631
372	19	2.9	572	14	CD315332	429	19	2.9	676	29	AG114956	AG114956
373	19	2.9	572	28	AQ959585	430	19	2.9	677	28	BH5197	BH5197
374	19	2.9	574	14	CF360147	431	19	2.9	680	13	CA058064	CA058064
375	19	2.9	576	9	AT172546	432	19	2.9	680	29	CG796525	CG796525
376	19	2.9	580	28	BZ388361	433	19	2.9	682	9	AV398127	AV398127
377	19	2.9	585	28	BE660251	434	19	2.9	684	28	BZ088561	BZ088561
378	19	2.9	586	12	BM781057	435	19	2.9	685	14	CB438449	CB438449
379	19	2.9	588	28	BZ915785	436	19	2.9	688	10	BF677499	BF677499
380	19	2.9	590	13	CA055901	437	19	2.9	688	29	CA053777	CA053777
381	19	2.9	591	29	DM16075	438	19	2.9	689	28	AZ536836	AZ536836
382	19	2.9	594	10	AM667741	439	19	2.9	689	28	AQ202318	AQ202318
383	19	2.9	594	12	BS722571	440	19	2.9	690	28	BZ489724	BZ489724
384	19	2.9	596	13	BS79529	441	19	2.9	691	14	CF206299	CF206299
385	19	2.9	596	14	CP676675	442	19	2.9	693	11	AY067503	AY067503
386	19	2.9	597	10	BE204316	443	19	2.9	700	13	BW148531	BW148531
387	19	2.9	597	28	AZ855990	444	19	2.9	700	28	BZ398479	BZ398479

c 445	19	2.9	704	14	C8442557	C8442557 693142 MA	c 501	19	2.9	787	12	BK397740
c 446	19	2.9	704	29	BK236876	Danlo rer	502	19	2.9	788	28	B2754779
c 447	19	2.9	706	29	C9914126	BK236876	c 503	19	2.9	790	28	B2071248
c 448	19	2.9	709	13	BG687518	BU687518 UI-CF-ECL	c 504	19	2.9	790	28	B2724058
c 449	19	2.9	710	13	BU241570	BU241570 603592880	505	19	2.9	793	28	AZ704780
c 450	19	2.9	711	12	BO009558	BO009558 UI-H-ED1-	506	19	2.9	793	28	B2995580
c 451	19	2.9	711	29	C8423425	C8423425 t19f-gss-	507	19	2.9	793	28	B2995580
c 452	19	2.9	712	9	AU078190	AU078190 AU078190	508	19	2.9	796	14	CD439054
c 453	19	2.9	714	10	BF383101	BF383101 601817108	c 510	19	2.9	797	14	CF203826
c 454	19	2.9	714	29	CE141326	CE141326 t19f-gss-	c 511	19	2.9	798	29	CC732154
c 455	19	2.9	716	28	B2113737	B2113737 CH230-219	c 512	19	2.9	799	14	CF203765
c 456	19	2.9	718	29	AG107341	AG107341 Pan tregl	c 513	19	2.9	799	29	CC688280
c 457	19	2.9	720	28	A2197680	A2197680 SP_1035_B	c 514	19	2.9	799	29	CC688280
c 458	19	2.9	722	10	AW973309	AW973309 EST385407	515	19	2.9	800	28	BH459124
c 459	19	2.9	722	28	BH977536	BH977536 cdh46d12-	516	19	2.9	802	10	BF627427
c 460	19	2.9	724	28	A2524750	A2524750 235PBH05	c 517	19	2.9	804	28	B2524195
c 461	19	2.9	725	29	BK157448	BK157448 Danlo rer	c 518	19	2.9	806	29	CG075551
c 462	19	2.9	726	28	BH920634	BH920634 cdh75h06.	519	19	2.9	806	29	CG428514
c 463	19	2.9	728	29	CC664863	CC664863 OGJIN46TH	c 520	19	2.9	806	29	BK185579
c 464	19	2.9	730	28	B2670407	B2670407 PUBBQ88TD	c 521	19	2.9	811	28	BH648094
c 465	19	2.9	731	14	CD099653	CD099653 AGENCOURT	c 522	19	2.9	812	14	CF148605
c 466	19	2.9	731	28	BH420325	BH420325 BOCID93TR	523	19	2.9	821	29	CG158558
c 467	19	2.9	733	28	AQ740762	AQ740762 HS_5508_A	c 524	19	2.9	822	28	BZ689910
c 468	19	2.9	734	29	CG834246	CG834246 ZMWB014	c 525	19	2.9	823	29	BZ424184
c 469	19	2.9	735	12	B1109231	B1109231 602897203	c 526	19	2.9	823	29	CC997171
c 470	19	2.9	736	28	B2684944	B2684944 PUBBPF8TD	c 527	19	2.9	828	28	BZ446705
c 471	19	2.9	737	28	B2054034	B2054034 Jm38f10.	c 528	19	2.9	828	29	BK200028
c 472	19	2.9	739	14	CB627873	CB627873 OS11EB03B	529	19	2.9	829	29	CG31005
c 473	19	2.9	739	14	CF206359	CF206359 RRB909151	c 530	19	2.9	830	28	BZ395789
c 474	19	2.9	739	28	B2659252	B2659252 CH240_269	c 531	19	2.9	831	28	BZ249387
c 475	19	2.9	740	14	CB431328	CB431328 607292 MA	532	19	2.9	831	29	CG079064
c 476	19	2.9	741	29	AG137908	AG137908 Pan tregl	c 533	19	2.9	832	28	BH679380
c 477	19	2.9	743	29	CC664874	CC664874 OGJIN46TV	c 534	19	2.9	834	28	CC118366
c 478	19	2.9	746	29	BK201783	BK201783 Danlo rer	535	19	2.9	835	14	CF222882
c 479	19	2.9	749	14	CF203777	CF203777 RRB909151	c 536	19	2.9	838	28	CC100801
c 480	19	2.9	750	28	B2441743	B2441743 BOKK64TF	c 537	19	2.9	844	10	BF104793
c 481	19	2.9	751	14	CF203838	CF203838 RRB909151	c 538	19	2.9	848	14	CF239904
c 482	19	2.9	753	29	CC749571	CC749571 ZMWB012	540	19	2.9	851	29	CG770292
c 483	19	2.9	759	28	B2524188	B2524188 OGJ574TC	c 541	19	2.9	852	12	B1861587
c 484	19	2.9	759	28	B2823865	B2823865 PUBBPF8TD	542	19	2.9	854	29	CG372677
c 485	19	2.9	762	28	B2754781	B2754781 PUBBPF8TD	c 543	19	2.9	855	12	B1861587
c 486	19	2.9	763	10	BF687689	BF687689 602066723	c 544	19	2.9	856	10	BF184671
c 487	19	2.9	765	10	BF246872	BF246872 601854236	c 545	19	2.9	857	28	BZ603613
c 488	19	2.9	765	28	BH516687	BH516687 BOCQ0A64TR	546	19	2.9	860	29	CC648289
c 489	19	2.9	767	29	BK175436	BK175436 Danlo rer	547	19	2.9	864	28	AZ686161
c 490	19	2.9	774	28	B2400221	B2400221 E1NBT3TR	548	19	2.9	866	9	AL564252
c 491	19	2.9	777	13	BU295590	BU295590 603738071	c 549	19	2.9	867	28	BH138223
c 492	19	2.9	777	29	CC560548	CC560548 CH240_470	c 550	19	2.9	867	28	BZ982337
c 493	19	2.9	777	29	CC648279	CC648279 OGPACT2TH	c 551	19	2.9	869	28	CC387549
c 494	19	2.9	779	14	CG309617	CG309617 AGENCOURT	c 552	19	2.9	874	14	CF944692
c 495	19	2.9	780	12	BG21957	BG21957 RST34612	c 553	19	2.9	875	10	BF576247
c 496	19	2.9	781	12	BG675786	BG675786 602621822	c 554	19	2.9	875	10	BF576247
c 497	19	2.9	781	12	B1888569	B1888569 2F637-2-0	c 555	19	2.9	877	28	BH163368
c 498	19	2.9	781	28	B2660259	B2660259 OGABJ02TV	556	19	2.9	878	29	CC833885
c 499	19	2.9	783	29	CC626746	CC626746 OGABJ02TV	557	19	2.9	881	28	BH135582
c 500	19	2.9	783	28	B281871	B281871 CH230-298						

C 558	19	2.9	883	28	A2671501	ENTLFB1TR	C 615	18	2.8	163	9	A1272046	A1272046 qj89b06.x
C 559	19	2.9	885	29	CG037742	PURBEB3TD	C 616	18	2.8	163	29	CE704180	CE704180 t1gr-gs-
C 560	19	2.9	886	29	CG455982	PUIKX29TD	C 617	18	2.8	164	28	BH908945	BH908945 SALK_0514
C 561	19	2.9	885	29	CG824097	SOYDL65TH	C 618	18	2.8	168	9	AV547745	AV547745 AV457745
C 562	19	2.9	886	29	CG929375	MBEMG3TF	C 619	18	2.8	177	9	AV418783	AV418783 AV418783
C 563	19	2.9	889	29	CG210355	OG3CA75TV	C 620	18	2.8	179	12	BG587876	BG587876 E51489651
C 564	19	2.9	889	29	CG245747	OG3AJ80TH	C 621	18	2.8	180	9	AV317644	AV317644 AV317644
C 565	19	2.9	890	28	A0746296	HS_2277_A	C 622	18	2.8	190	10	BF197509	BF197509 7o63906.x
C 566	19	2.9	891	13	BK846462	BK846462	C 623	18	2.8	195	9	AA905995	AA905995 g189f01.s
C 567	19	2.9	894	28	BH152191	ENTPM03TR	C 624	18	2.8	196	9	A1717602	A1717602 wK39d05.x
C 568	19	2.9	895	29	CG711183	TCB47_2.B	C 625	18	2.8	197	10	AW799699	AW799699 PML-UD005
C 569	19	2.9	906	28	BK846733	BK846733	C 626	18	2.8	213	9	A1523405	A1523405 at72606.x
C 570	19	2.9	906	28	BH134935	ENTG06GTF	C 627	18	2.8	213	10	BH062035	BH062035 B062035
C 571	19	2.9	908	13	BK329964	BK329964	C 628	18	2.8	214	28	A2820844	A2820844 2M0093N16
C 572	19	2.9	908	14	CGD27992	SCVFL1CI	C 629	18	2.8	216	10	BF907394	BF907394 MRO-UT004
C 573	19	2.9	909	14	CA280510	CG929348	C 630	18	2.8	222	9	AV368716	AV368716 AV368716
C 574	19	2.9	910	29	CG929348	MBEMD02TR	C 631	18	2.8	223	10	BB421704	BB421704 BB421704
C 575	19	2.9	911	28	A2527591	ENTBH92TR	C 632	18	2.8	236	10	BB214458	BB214458 BB214458
C 576	19	2.9	912	28	A2682943	ENTLCT4TF	C 633	18	2.8	239	10	BB169342	BB169342 BB169342
C 577	19	2.9	916	28	CG215347	CH261-771	C 634	18	2.8	240	9	AU074775	AU074775 AU074775
C 578	19	2.9	919	14	CA793165	AGENC0URT	C 635	18	2.8	240	9	AU074775	AU074775 AU074775
C 579	19	2.9	921	29	CG134308	AGENC0URT	C 636	18	2.8	242	14	CG367726	CG367726 B2470_eat
C 580	19	2.9	922	28	A2668004	ENTGV20TF	C 637	18	2.8	248	10	BB074631	BB074631 BB074631
C 581	19	2.9	928	28	BH164132	ENTSH39TR	C 638	18	2.8	248	29	BK658660	BK658660 Atc6b10p3
C 582	19	2.9	932	29	CG174892	BH164132	C 639	18	2.8	250	14	CG047966	CG047966 Atc9a05.x
C 583	19	2.9	935	13	BH449886	603213523	C 640	18	2.8	251	9	A1581616	A1581616 at93e05.x
C 584	19	2.9	935	29	CG351413	OG0CCT5TH	C 641	18	2.8	254	28	BH183055	BH183055 t2 F_06-
C 585	19	2.9	940	29	CG343898	OG0DO07TH	C 642	18	2.8	254	29	CE038455	CE038455 t1gr-gs-
C 586	19	2.9	946	28	CG381083	PURHU05TD	C 643	18	2.8	256	29	CE038455	CE038455 t1gr-gs-
C 587	19	2.9	961	13	BH916400	CG929348	C 644	18	2.8	257	28	B2961088	B2961088 PUG0389TD
C 588	19	2.9	965	29	CG866382	NDL_108M1	C 645	18	2.8	266	10	BB041609	BB041609 BB041609
C 589	19	2.9	966	23	CG351420	OG0CCT5TV	C 646	18	2.8	266	10	BB177775	BB177775 BB177775
C 590	19	2.9	969	13	BH718203	BY718203	C 647	18	2.8	266	14	T72567	T72567 yC80407.s1
C 591	19	2.9	978	29	CG149997	PURFH28TB	C 648	18	2.8	274	10	BE509036	BE509036 UI-H-B14-
C 592	19	2.9	1003	13	BH913308	BH913308	C 649	18	2.8	274	10	BE509036	BE509036 RCI-UT003
C 593	19	2.9	1010	28	B2610671	WHAC101TF	C 650	18	2.8	282	9	A1204402	A1204402 q772d06.x
C 594	19	2.9	1013	10	B2420876	BK20876	C 651	18	2.8	282	12	BM092791	BM092791 s6b18r08.x
C 595	19	2.9	1014	29	CG149899	PURFH28TD	C 652	18	2.8	282	12	BM092791	BM092791 s6b18r08.x
C 596	19	2.9	1017	29	CGS01003	DR09ph11	C 653	18	2.8	283	10	BB366758	BB366758 BB366758
C 597	19	2.9	1027	28	CG278079	CH261-151	C 654	18	2.8	286	10	BB264158	BB264158 BB264158
C 598	19	2.9	1057	28	B2456057	BONKN95TR	C 655	18	2.8	286	14	N90549	N90549 zB41608.s1
C 599	19	2.9	1075	28	BH684779	BOKMG71TR	C 656	18	2.8	290	9	AV035896	AV035896 AV035896
C 600	19	2.9	1075	28	B2456050	BONKN95TF	C 657	18	2.8	291	9	A1263007	A1263007 q234e10.x
C 601	19	2.9	1101	13	BK327951	BK327951	C 658	18	2.8	292	10	BB384163	BB384163 BB384163
C 602	19	2.9	1109	28	B2392216	ELINC019TR	C 659	18	2.8	293	12	B0399468	B0399468 B0399468
C 603	19	2.9	1135	28	CG234931	CH261-80J	C 660	18	2.8	293	28	CC124410	CC124410 NDL_78A4.
C 604	19	2.9	1159	28	CG291311	CH261-94K	C 661	18	2.8	293	29	CC679976	CC679976 OGHAZ67V
C 605	19	2.9	1165	13	BU422983	603953683	C 662	18	2.8	294	10	BB487578	BB487578 BB487578
C 606	19	2.9	1195	28	CG221535	CH261-99K	C 663	18	2.8	295	10	BB504221	BB504221 BB504221
C 607	19	2.9	1229	28	CG282083	CH261-158	C 664	18	2.8	295	28	A2005920	A2005920 RPCI-23-3
C 608	19	2.9	1240	28	A0028206	Pan tcegl	C 665	18	2.8	299	10	AM415628	AM415628 50031 MAR
C 609	19	2.9	1447	11	A0101085	Mus muscu	C 666	18	2.8	301	10	BB107767	BB107767 BB107767
C 610	19	2.9	2973	11	A0307072	Mus muscu	C 667	18	2.8	301	14	N70978	N70978 z434e07.s1
C 611	18	2.8	103	29	CNS01UID	AL167854	C 668	18	2.8	306	14	CE262778	CE262778 AUN-1P1t
C 612	18	2.8	106	13	BH887988	Tetradon	C 669	18	2.8	306	29	CG930349	CG930349 MBSE105TR
C 613	18	2.8	137	14	CA380342	P002806	C 670	18	2.8	307	29	CE702960	CE702960 t1gr-gs-
C 614	18	2.8	138	13	BK251982	BK251982	C 671	18	2.8	309	9	AA813553	AA813553 a166h07.s



c 672	18	2.8	309	10	BB393063	BB393063	c 729	18	2.8	376	9	AA454370	AA454370	MBACX0GO	
c 673	18	2.8	310	9	AT700142	AT700142 tq21e04.x	c 730	18	2.8	377	9	AA644458	AA644458	zue8f0e.s	
c 674	18	2.8	310	14	CE287632	CE287632 EST750354	c 731	18	2.8	377	10	BB322653	BB322653	BB322653	
c 675	18	2.8	310	20	CG020711	CG020711 ZMMBC055	c 732	18	2.8	378	12	BI322167	BI322167	kx17b06.y	
c 676	18	2.8	311	10	BB272130	BB272130 BB272130	c 733	18	2.8	378	14	CK293889	CK293889	EST75613	
c 677	18	2.8	311	12	BM162016	BM162016 EST564539	c 734	18	2.8	379	14	CK330789	CK330789	CG0306H04-	
c 678	18	2.8	311	13	BB061063	BB061063 sap48f08.	c 735	18	2.8	381	29	CC793525	CC793525	SLAK_0153	
c 679	18	2.8	313	29	CG287425	CG287425 OGD8K53TH	c 736	18	2.8	382	29	CG376370	CG376370	OGD8287H	
c 680	18	2.8	314	9	AV148267	AV148267 AV148267	c 737	18	2.8	383	9	AV524319	AV524319	AV524319	
c 681	18	2.8	314	10	BB119135	BB119135 BB119135	c 738	18	2.8	384	12	BG234590	BG234590	dhb67e10.	
c 682	18	2.8	314	28	AZ759645	AZ759645 ev02e06.x	c 739	18	2.8	386	9	A1630945	A1630945	ty99e02.x	
c 683	18	2.8	316	10	BB215221	BB215221 BB215221	c 740	18	2.8	387	9	A1554356	A1554356	fq1e6d03.x	
c 684	18	2.8	316	12	BI497378	BI497378 df135e03.	c 741	18	2.8	388	12	BI050763	BI050763	RC6-GN007	
c 685	18	2.8	316	28	AQ236494	AQ236494 HS_2033_B	c 742	18	2.8	389	28	AQ217203	AQ217203	HS_2139_A	
c 686	18	2.8	317	29	BS083227	BS083227 dc10c10.x	c 743	18	2.8	391	9	AU087559	AU087559	AU087559	
c 687	18	2.8	317	29	AG264020	AG264020 Lotus cor	c 744	18	2.8	392	9	A1417873	A1417873	cg72d03.x	
c 688	18	2.8	318	9	BM072966	BM072966 na43d03.x	c 745	18	2.8	395	13	BX524438	BX524438	BX524438	
c 689	18	2.8	318	12	BM149575	BM149575 TCAP3D12	c 746	18	2.8	395	29	CE315286	CE315286	tl67-gsa-	
c 690	18	2.8	318	28	AQ423026	AQ423026 CTBT-EI-	c 747	18	2.8	396	9	A1016635	A1016635	ou96a03.x	
c 691	18	2.8	322	9	AA335842	AA335842 EST40318	c 748	18	2.8	396	14	CF081B86	CF081B86	QHL14K23.	
c 692	18	2.8	324	10	AW768321	AW768321 hcK39904.x	c 749	18	2.8	396	14	N71037	N71037	za35e06.s1	
c 693	18	2.8	324	10	BB085173	BB085173 BB085173	c 750	18	2.8	398	29	CC466910	CC466910	CH240_136	
c 694	18	2.8	325	28	BE192929	BE192929 CH230-279	c 751	18	2.8	399	14	T85387	T85387	yd76e02.f1	
c 695	18	2.8	326	28	BQ256796	BQ256796 BQMT49TF	c 752	18	2.8	400	9	A1973147	A1973147	wf52b07.x	
c 696	18	2.8	329	13	BQ253787	BQ253787 san67b10.	c 753	18	2.8	400	13	BI574572	BI574572	BYS74572	
c 697	18	2.8	332	9	AA497251	AA497251 fa03h10.s	c 754	18	2.8	400	14	W80609	W80609	zdB2e11.s1	
c 698	18	2.8	332	10	BB780287	BB780287 BB780287	c 755	18	2.8	404	9	A1540307	A1540307	cg34d11.x	
c 699	18	2.8	333	12	BI742418	BI742418 kt50e12.y	c 756	18	2.8	404	14	CK292876	CK292876	EST75590	
c 700	18	2.8	334	12	BG626293	BG626293 CC-esf1CL	c 757	18	2.8	405	9	AA809630	AA809630	n21h01.s	
c 701	18	2.8	335	13	BK679866	BK679866 BK679866	c 758	18	2.8	405	14	CA682909	CA682909	MB196.s	
c 702	18	2.8	336	9	AU267023	AU267023 AU267023	c 759	18	2.8	406	28	B2761419	B2761419	SLAK_0004	
c 703	18	2.8	336	14	CF807601	CF807601 p3HB026xE	c 760	18	2.8	410	14	CB804014	CB804014	AMGRNUC:S	
c 704	18	2.8	337	9	AL389348	AL389348 MCB54C08	c 761	18	2.8	411	12	BM122223	BM122223	LO507B09-	
c 705	18	2.8	341	9	A1000490	A1000490 cs95b01.s	c 762	18	2.8	411	28	AZ756397	AZ756397	ev07e07.f	
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c 708	18	2.8	347	9	AL272916	AL272916 AL272916	c 765	18	2.8	412	14	CE474335	CE474335	tl67-gsa-	
c 709	18	2.8	350	14	CF504520	CF504520 USD8-FP_1	c 766	18	2.8	412	14	T79553	T79553	tl67-gsa-	
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c 711	18	2.8	355	9	A1139435	A1139435 qc20e01.x	c 768	18	2.8	413	29	CE474335	CE474335	tl67-gsa-	
c 712	18	2.8	355	14	CD450479	CD450479 USD8-FP_1	c 769	18	2.8	414	28	AQ355829	AQ355829	CTBT-EI-	
c 713	18	2.8	355	28	AZ755639	AZ755639 ev02d11.x	c 770	18	2.8	415	9	A1381523	A1381523	te76c12.x	
c 714	18	2.8	356	12	BP432166	BP432166 BP432166	c 771	18	2.8	417	10	BF875164	BF875164	QV3-E7010	
c 715	18	2.8	356	13	BI340756	BI340756 BI340756	c 772	18	2.8	418	28	AZ254394	AZ254394	Gm_UHP001	
c 716	18	2.8	357	10	AW530473	AW530473 UI-R-C4-a	c 773	18	2.8	418	28	BH744310	BH744310	gt35d03.b	
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c 816	18	2.8	445	29	CNS06C8	A1392694_77 end of	c 873	18	2.8	486	13	BK681490
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c 904	18	2.8	504	28	AA060067	AA060067 CIT-HSP-2	c 961	18	2.8	551	13	BX58091	BX58091 BX58091
c 905	18	2.8	505	9	AA395681	AA395681 28083_Lam	c 962	18	2.8	551	13	BX58091	BX58091 BX58091
c 906	18	2.8	506	13	BQ426888	BQ426888 CgHem 017	c 963	18	2.8	552	12	BW053049	BW053049 NISC_g706
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c 908	18	2.8	506	28	BK304999	BK304999 KD3261.q1	c 965	18	2.8	552	28	CC070819	CC070819 604456_MA
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c 914	18	2.8	514	9	A1999076	A1999076 701517060	c 971	18	2.8	559	12	BP523715	BP523715 BP523715
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c 923	18	2.8	519	9	A1675277	A1675277 WC21d08.x	c 980	18	2.8	565	9	AL694074	AL694074 DKEP313C
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# ALIGNMENTS

RESULT 1	AG243044/c	471 bp	DNA	linear	GSS 19-JUL-2003
LOCUS	AG243044				
DEFINITION	Lotus corniculatus var. japonicus DNA, clone: jJ12a08_not, genomic				
survey sequence.	AG243044				
ACCESSION	AG243044.1	GI:26642809			
VERSION					
KEYWORDS	GSS.				

**SOURCE**  
**ORGANISM** *Lotus corniculatus* var. *japonicus* (*Lotus japonicus*)  
*Lotus corniculatus* var. *japonicus*  
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
 Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;  
 rosids; eurosids 1; Fabales; Fabaceae; Papilionoideae; Loteeae;  
*Lotus*.

**REFERENCE**  
 1 Sato, S., Nakamura, Y. and Tsubate, S.  
**TITLE** *Lotus japonicus* TAC End sequences  
**JOURNAL** Published Only in Database (2002)  
**REFERENCE** 2 (bases 1 to 471)  
**AUTHORS** Sato, S.  
**TITLE** Direct Submision  
**JOURNAL** Submitted (20-NOV-2002) Shussei Sato, Kazusa DNA Research Institute,  
 The First Laboratory for Plant Gene Research; 2-6-7  
 Kazusa-Kametani, Kisarazu, Chiba 292-0818, Japan  
 (E-mail: sato@kazusa.or.jp, URL: <http://www.kazusa.or.jp/en/plant/>,  
 Tel: 81-438-52-3935 (ex. 2336), Fax: 81-438-52-3934)  
**FEATURES**  
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 /note="VECTOR: pYIPACT-synonym: Lotus japonicus"

**ORIGIN**  
 Query Match 3.7%; Score 24; DB 29; Length 471;  
 Best Local Similarity 100.0%; Pred. No. 3.5;  
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

**QY** 453 TATATTAATTAATGAATGAAA 476  
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 Db 211 TATATTAATTAATGAATGAAA 188

**RESULT 2**  
 BM162873 621 bp mRNA linear EST 04-DEC-2001  
**LOCUS** EST56396 PyBS Plasmodium yoelli yoelli cDNA clone PYCKY03 5' end,  
**DEFINITION** mRNA sequence.  
**ACCESSION** BM162873  
**VERSION** BM162873.1 GI:17308554  
**KEYWORDS** EST.  
**SOURCE** Plasmodium yoelli yoelli  
**ORGANISM** Plasmodium yoelli yoelli  
 Eukaryota; Alveolata; Apicomplexa; Haemosporidae; Plasmodium.  
**REFERENCE** 1 (bases 1 to 621)  
 Carlton, J.M., Daly, T.M., Long, C.A., Bergman, L.W., Valdivia, A.B.,  
 Fraser, C.M. and Carnucci, D.J.  
**TITLE** Plasmodium yoelli EST project at TIGR  
**JOURNAL** Unpublished (2001)  
**COMMENT** Contact: Jane Carlton  
 Parasite Genomics Group

The Institute for Genomic Research  
 9712 Medical Center Drive, Rockville, MD 20850, USA  
 Tel: 301-530-9319  
 Fax: 301-838-0208  
 Email: [carlton@tigr.org](mailto:carlton@tigr.org)  
 For clone info, please contact the Malaria Research and Reference  
 Reagent Resource Center, ATCC  
<http://www.malaria.mr4.org/mr4pages/index.html>  
 Seq primer: ADF.

**FEATURES**  
 source  
 1..621  
 Location/Qualifiers  
 1..621  
 /organism="Plasmodium yoelli yoelli"  
 /mol\_type="mRNA"  
 /strain="17XL"  
 /sub\_species="yoelli"  
 /db\_xref="taxon:73239"  
 /clone="PYCKY03"  
 /dev\_stage="Asexual blood stages"  
 /lab\_host="E. coli XL-1 Blue"  
 /clone\_lib="PyBS"  
 /note="Vector: pAD-GAL4; At 20-25% parasitemia, blood was  
 collected from BALB/cByJ mice infected with Py17XL  
 parasites, and leukocytes removed by passage over  
 microcrystalline cellulose columns. Total RNA was  
 isolated using the guanidium isothiocyanate method, and  
 mRNA isolated using oligo(dT)-cellulose chromatography.  
 First strand cDNA synthesis was completed using a 50-base  
 primer and reverse transcriptase in the presence of  
 5-methyl dCTP. After second strand synthesis, uneven  
 termini were treated with Pfu DNA polymerase and EcoRI  
 adaptors ligated to the blunt ends. The sample was cleaved  
 with XhoI and separated on a Sephacryl S-500 column.  
 Size-fractionated cDNA was precipitated and ligated to  
 HybridZAP arms directionally using EcoRI-XhoI cleaved arms.  
 After packaging, the phagemid vector (pAD-GAL4) was  
 excised from the HybridZAP vector and plasmid DNA  
 isolated."

**ORIGIN**  
 Query Match 3.7%; Score 24; DB 12; Length 621;  
 Best Local Similarity 100.0%; Pred. No. 3.2;  
 Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

**QY** 415 ATTAATGAATATCAAAAAGATATA 438  
 ||||||||||||||||||  
 Db 49 ATTAATGAATATCAAAAAGATATA 72

**RESULT 3**  
 CG185633/c 688 bp DNA linear GSS 21-AUG-2003  
**LOCUS** PUC19P697D ZM 0.6-1.0 KB zea mays genomic clone ZMMB7a0552L16,  
**DEFINITION** genomic survey sequence.  
**ACCESSION** CG185633  
**VERSION** CG185633.1 GI:34076694  
**KEYWORDS** GSS.  
**SOURCE** Zea mays

ORGANISM Zea mays

REFERENCE Eukaryote; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.

AUTHORS 1 (bases 1 to 688)  
Whitelaw, C.A., Quackenbush, J., Van Aken, S., Uterback, T., Reenick, A., Fraser, C.M., Yuan, Y., San Miguel, P., Ma, J. and Bennetzen, J.

TITLE Maize Genomics Consortium

JOURNAL Unpublished (2003)

COMMENT Other\_GSSs: PUCP69TB  
Contact: Cathy Whitelaw

TIGR 9712 Medical Center Drive, Rockville, MD 20850, USA  
Tel: 301-838-5843  
Fax: 301-838-0208  
Email: whitelaw@tigr.org  
Seq primer: TF  
Class: sheared ends.

FEATURES  
source location/Qualifiers  
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/mol\_type="genomic DNA"  
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/clone="ZMWERa052L18"  
/clone\_lib="ZM\_0.6\_1.0\_KB"  
/note="Vector: PCR4-TOPO; Site\_1: EcoRI; 0.6-1.0 kb hgh  
Cot selected genomic DNA library"

ORIGIN

Query Match 3.7%; Score 24; DB 29; Length 688;  
Best Local Similarity 100.0%; Pred.No. 3;  
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 437 TATCTATTATTAATAATATTA 460  
|||||  
Db 130 TATCTATTATTAATAATATTA 107

RESULT 4  
B2728378/c 824 bp DNA linear GSS 03-MAR-2003

LOCUS OGECR29TC ZM 0.7.1.5\_KB Zea mays genomic clone ZMWERa0233E10,

DEFINITION genomic survey sequence.

ACCESSION B2728378

VERSION B2728378.1 GI:28701626

KEYWORDS GSS.

SOURCE Zea mays

ORGANISM Zea mays

REFERENCE Eukaryote; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.

AUTHORS 1 (bases 1 to 824)  
Whitelaw, C.A., Quackenbush, J., Van Aken, S., Uterback, T., Reenick, A., Fraser, C.M., Budiman, M.A., Bedell, J.A., Rohlfing, T., Citek, R.W., Numberg, A., Robbins, D. and Lakey, N.

TITLE Consortium for Maize Genomics

JOURNAL Unpublished (2002)

COMMENT Other\_GSSs: OGECR29TC  
Contact: Cathy Whitelaw

TIGR 9712 Medical Center Drive, Rockville, MD 20850, USA  
Tel: 301-838-5843  
Fax: 301-838-0208  
Email: whitelaw@tigr.org  
Seq primer: TF  
Class: sheared ends.

FEATURES  
source location/Qualifiers  
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/mol\_type="genomic DNA"  
/strain="B73"  
/db\_xref="taxon:4577"  
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/clone\_lib="ZM\_0.7.1.5\_KB"  
/note="Vector: pBCSK-3; Site\_1: HincII; 0.7-1.5 kb  
methylation filtered genomic DNA library"

ORIGIN

Query Match 3.7%; Score 24; DB 28; Length 824;  
Best Local Similarity 100.0%; Pred.No. 2.6;  
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 437 TATCTATTATTAATAATATTA 460  
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Db 175 TATCTATTATTAATAATATTA 152

RESULT 5  
CG296548/c 848 bp DNA linear GSS 25-AUG-2003

LOCUS OGBIC11TH ZM 0.7.1.5\_KB Zea mays genomic clone ZMWERa0722A21,

DEFINITION genomic survey sequence.

ACCESSION CG296548

VERSION CG296548.1 GI:34210762

KEYWORDS GSS.

SOURCE Zea mays

ORGANISM Zea mays

REFERENCE Eukaryote; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.

AUTHORS 1 (bases 1 to 848)  
Whitelaw, C.A., Quackenbush, J., Van Aken, S., Uterback, T., Reenick, A., Fraser, C.M., Budiman, M.A., Bedell, J.A., Rohlfing, T., Citek, R.W., Numberg, A., Robbins, D. and Lakey, N.

TITLE Consortium for Maize Genomics

JOURNAL Unpublished (2002)

COMMENT Other\_GSSs: OGBIC11TV  
Contact: Cathy Whitelaw

TIGR 9712 Medical Center Drive, Rockville, MD 20850, USA  
Tel: 301-838-5843  
Fax: 301-838-0208

Email: white@sligr.org

Seq primer: TR

Class: sheared ends.

# FEATURES

source

Location/Qualifiers

1..848

/organism="Zea mays"

/mol\_type="genomic DNA"

/strain="B73"

/db\_xref="taxon:4577"

/clone="ZM86M0722A21"

/clone\_1bp="ZM 0.7-1.5 kb"

/note="vector: pBCSK-; Site\_1: HincII; 0.7-1.5 kb  
methylation filtered genomic DNA library"

# ORIGIN

Query Match 3.7%; Score 24; DB 29; Length 848;

Best Local Similarity 100.0%; Pred.No. 2.8;

Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 437 TATCTTATTTAAAAATATATTTA 460

|||||

DB 157 TATCTTATTTAAAAATATATTTA 134

Search completed: October 15, 2004, 06:25:02

Job time : 3107.66 secs

OM nucleic - nucleic search, using sw model

Run on: October 14, 2004, 19:00:14 ; Search time 1339.89 Seconds  
(without alignments)  
8442.862 Million cell updates/sec

Title: US-09-407-804A-6

Perfect score: 261  
Sequence: 1 atgtatctcgaaatagcgga.....acttgatcatgaatgtag 261

Scoring table: OLIGO\_NUC  
Gapop 60.0 , Gapext 60.0

Searched: 3470272 seqs, 2167151695 residues

Word size : 0

Total number of hits satisfying chosen parameters: 6940544

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database :

GenEmbl: +  
1: gb\_ba: +  
2: gb\_hg: +  
3: gb\_in: +  
4: gb\_cm: +  
5: gb\_ov: +  
6: gb\_pac: +  
7: gb\_ph: +  
8: gb\_pl: +  
9: gb\_pr: +  
10: gb\_ro: +  
11: gb\_ets: +  
12: gb\_ey: +  
13: gb\_un: +  
14: gb\_vl: +  
15: em\_de: +  
16: em\_fun: +  
17: em\_hum: +  
18: em\_in: +  
19: em\_mu: +  
20: em\_cm: +  
21: em\_or: +  
22: em\_ov: +  
23: em\_pac: +  
24: em\_ph: +  
25: em\_pl: +  
26: em\_ro: +  
27: em\_ets: +

28: em\_un: +  
29: em\_vl: +  
30: em\_hg\_hum: +  
31: em\_hg\_inv: +  
32: em\_hg\_other: +  
33: em\_hg\_mus: +  
34: em\_hg\_pin: +  
35: em\_hg\_rtd: +  
36: em\_hg\_mam: +  
37: em\_hg\_vrt: +  
38: em\_ay: +  
39: em\_hggo\_hum: +  
40: em\_hggo\_mus: +  
41: em\_hggo\_other: +

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	261	100.0	261	6	BD245277
2	261	100.0	297	6	BD245280
3	261	100.0	41708	6	BD245281
4	261	100.0	41708	6	AR368770
5	181	69.3	348527	1	AP003360
6	176	67.4	45636	7	AB044554
7	161	61.7	42942	7	AB045978
8	159	60.9	41401	7	AB009866
9	133	51.0	43081	7	AP001553
10	39	14.9	291150	1	AP003135
11	29	11.1	267	6	AX618246
12	29	11.1	42722	7	AF424783
13	29	11.1	272850	1	AF004828
14	28	10.7	380	6	AR355085
15	28	10.7	43594	6	BD245634
16	28	10.7	43604	7	AF424781
17	27	10.3	348650	1	AP003364
18	25	9.6	258	6	AX618548
19	21	8.0	190220	5	AL935305
20	20	7.7	163899	2	AC073060
21	20	7.7	168459	5	AL772289
22	20	7.7	177517	2	AC140389
23	20	7.7	241679	2	AC020861
24	20	7.7	257471	2	AC139675
25	20	7.7	267943	2	AC136702
26	19	7.3	237	6	AR383649
27	19	7.3	480	8	RID428847
28	19	7.3	991	6	A26050
29	19	7.3	991	6	A26050
30	19	7.3	10408	6	166486
31	19	7.3	10408	6	166486
32	19	7.3	17309	9	AC130709
33	19	7.3	46024	2	AC100659

34	19	7.3	64167	9	HSBA89B2	AL080245 Human DNA	91	18	6.9	2000	6	AX820574	AX820574 Sequence
35	19	7.3	82700	2	AC015635	AC015635 Homo sapi	92	18	6.9	2000	6	AX831604	AX831604 Sequence
36	19	7.3	93476	2	AC112352.3	Continuation (4 of	93	18	6.9	3542	8	SCYDL149W	SCYDL149W Sequence
37	19	7.3	93476	2	AC112352.3	Continuation (4 of	94	18	6.9	4307	9	HSTYL	HSTYL Sequence
38	19	7.3	106253	8	AP003815	AP003815 Oryza sat	95	18	6.9	5958	6	AX779908	AX779908 Sequence
39	19	7.3	110000	2	AC096457.1	Continuation (2 of	96	18	6.9	7689	9	AL603626	AL603626 Sequence
40	19	7.3	110000	2	AC096457.2	Continuation (3 of	97	18	6.9	11859	4	AC144695	AC144695 Sequence
41	19	7.3	134308	9	AC011488	AC011488 Homo sapi	98	18	6.9	23096	8	SCIV23	SCIV23 Sequence
42	19	7.3	136377	9	HSDB78N10	AL121959 Human DNA	99	18	6.9	29885	9	AC093679	AC093679 Sequence
43	19	7.3	139629	2	AP003809	AP003809 Oryza sat	100	18	6.9	33099	6	AX059508	AX059508 Sequence
44	19	7.3	139848	2	AP004335	AP004335 Oryza sat	101	18	6.9	37991	9	AP000565	AP000565 Sequence
45	19	7.3	145476	2	AC044911	AC044911 Homo sapi	102	18	6.9	44583	6	AX059545	AX059545 Sequence
46	19	7.3	147638	8	AP003303	AP003303 Oryza sat	103	18	6.9	58608	2	AC100499	AC100499 Sequence
47	19	7.3	152946	2	AC011763	AC011763 Mus muscu	104	18	6.9	70626	9	AL356274	AL356274 Sequence
48	19	7.3	157244	9	AP005204	AP005204 Homo sapi	105	18	6.9	72590	5	AL603744	AL603744 Sequence
49	19	7.3	158432	2	AC105338	AC105338 Sus scrofa	106	18	6.9	74589	8	AB010068	AB010068 Sequence
50	19	7.3	158577	9	AP001485	AP001485 Homo sapi	107	18	6.9	82596	8	FGH8	FGH8 Sequence
51	19	7.3	159874	2	AC113867	AC113867 Rattus no	108	18	6.9	83594	8	AB008268	AB008268 Sequence
52	19	7.3	165761	2	AC145750	AC145750 Homo sapi	109	18	6.9	86004	9	HS1123	HS1123 Sequence
53	19	7.3	167280	2	AC102825	AC102825 Mus muscu	110	18	6.9	90425	2	AC138337	AC138337 Sequence
54	19	7.3	169116	5	BX324202	BX324202 Zebrafish	111	18	6.9	93276	9	AL139124	AL139124 Sequence
55	19	7.3	169682	9	AC010854	AC010854 Homo sapi	112	18	6.9	103920	2	AC014955	AC014955 Sequence
56	19	7.3	170123	9	AC018371	AC018371 Homo sapi	113	18	6.9	109491	9	AC022224	AC022224 Sequence
57	19	7.3	172113	2	AP001176	AP001176 Homo sapi	114	18	6.9	110000	2	AC098244.1	AC098244.1 Sequence
58	19	7.3	175802	10	AL805929	AL805929 Mouse DNA	115	18	6.9	110000	2	AL359032.0	AL359032.0 Sequence
59	19	7.3	177379	10	AC140212	AC140212 Mus muscu	116	18	6.9	110000	2	AL360016.2	AL360016.2 Sequence
60	19	7.3	178239	2	AC011968	AC011968 Homo sapi	117	18	6.9	110000	2	AL928982.1	AL928982.1 Sequence
61	19	7.3	178469	2	BX248504	BX248504 Dantio rer	118	18	6.9	111692	9	AL161783	AL161783 Sequence
62	19	7.3	179941	2	BX664752	BX664752 Dantio rer	119	18	6.9	118473	9	AL590726	AL590726 Sequence
63	19	7.3	181170	2	AC109244	AC109244 Mus muscu	120	18	6.9	118473	10	AL671969	AL671969 Sequence
64	19	7.3	186594	2	BX530068	BX530068 Dantio rer	121	18	6.9	123576	9	AC015969	AC015969 Sequence
65	19	7.3	194578	2	AC007832	AC007832 Homo sapi	122	18	6.9	125302	8	ATT4L20	ATT4L20 Sequence
66	19	7.3	194604	2	AP001275	AP001275 Homo sapi	123	18	6.9	126807	9	HS391022	HS391022 Sequence
67	19	7.3	201182	9	AC069540	AC069540 Homo sapi	124	18	6.9	128765	3	AC010053	AC010053 Sequence
68	19	7.3	202205	2	AC068895	AC068895 Homo sapi	125	18	6.9	129722	9	HS15005	HS15005 Sequence
69	19	7.3	206975	2	AC133827	AC133827 Rattus no	126	18	6.9	133263	2	AC126235	AC126235 Sequence
70	19	7.3	208363	10	AL691416	AL691416 Mouse DNA	127	18	6.9	137043	9	AC068794	AC068794 Sequence
71	19	7.3	209535	2	BX546476	BX546476 Dantio rer	128	18	6.9	138350	2	AC010801	AC010801 Sequence
72	19	7.3	210617	2	AC034201	AC034201 Homo sapi	129	18	6.9	140212	2	AC016790	AC016790 Sequence
73	19	7.3	212843	2	BX511103	BX511103 Dantio rer	130	18	6.9	140987	9	AC099061	AC099061 Sequence
74	19	7.3	223808	2	AC114139	AC114139 Rattus no	131	18	6.9	141742	9	AC092621	AC092621 Sequence
75	19	7.3	226147	9	AP002478	AP002478 Homo sapi	132	18	6.9	141915	2	AC099636	AC099636 Sequence
76	19	7.3	231946	2	AC115544	AC115544 Rattus no	133	18	6.9	143220	9	AL389887	AL389887 Sequence
77	19	7.3	244739	2	AC112042	AC112042 Rattus no	134	18	6.9	145763	2	AC064809	AC064809 Sequence
78	19	7.3	245090	2	BX890597	BX890597 Dantio rer	135	18	6.9	146248	2	AC013677	AC013677 Sequence
79	19	7.3	278299	2	AC129681	AC129681 Rattus no	136	18	6.9	146843	9	AC096761	AC096761 Sequence
80	19	7.3	288339	14	AF198100	AF198100 Fowlpox v	137	18	6.9	146921	9	AC007992	AC007992 Sequence
81	19	7.3	288888	9	HSA310932	AJ310932 Homo sapi	138	18	6.9	147114	9	AP001939	AP001939 Sequence
82	19	7.3	324999	2	AC098418	AC098418 Rattus no	139	18	6.9	147419	9	HS738P11	HS738P11 Sequence
83	19	7.3	329181	2	AC094238	AC094238 Rattus no	140	18	6.9	148282	9	AC024649	AC024649 Sequence
84	18	6.9	249	11	GA1301	GA1301 human STS W	141	18	6.9	149907	4	AC091436	AC091436 Sequence
85	18	6.9	520	6	BD119686	BD119686 EST and e	142	18	6.9	150242	9	AC006195	AC006195 Sequence
86	18	6.9	836	11	BV051957	BV051957 S212P6049	143	18	6.9	152202	9	AC094081	AC094081 Sequence
87	18	6.9	836	11	BV051957	BV051957 S212P6049	144	18	6.9	152324	2	AC136938	AC136938 Sequence
88	18	6.9	1880	5	BC052972	BC052972 Dantio rer	145	18	6.9	153099	3	CNS05TCE	CNS05TCE Sequence
89	18	6.9	2000	6	AX510142	AX510142 Sequence	146	18	6.9	153440	3	AC105263	AC105263 Sequence
90	18	6.9	2000	6	AX596276	AX596276 Sequence	147	18	6.9	155028	2	BX547940	BX547940 Sequence



c 148	18	6.9 155035	2	AC012548	AC012548 Homo sapi	205	18	6.9 184706	9	AC004782	AC004782 Homo sapi
c 149	18	6.9 153475	5	BK321885	BK321885 Zebrafish	c 206	18	6.9 186117	9	AC072046	AC072046 Homo sapi
c 150	18	6.9 156783	9	AC015998	AC015998 Homo sapi	c 207	18	6.9 186322	2	BK294389	BK294389 Danto rer
c 151	18	6.9 157088	5	AL935300	AL935300 Zebrafish	c 208	18	6.9 187684	2	AC016008	AC016008 Homo sapi
c 152	18	6.9 157494	10	AL606512	AL606512 Mouse DNA	209	18	6.9 189386	2	AP001456	AP001456 Homo sapi
c 153	18	6.9 159231	2	AC116499	AC116499 Mus muscu	c 210	18	6.9 189579	9	AL354733	AL354733 Human DNA
c 154	18	6.9 159670	2	AC027626	AC027626 Homo sapi	c 211	18	6.9 190506	2	AC068990	AC068990 Homo sapi
c 155	18	6.9 159806	2	AC024340	AC024340 Homo sapi	c 212	18	6.9 190520	2	AC138271	AC138271 Homo sapi
c 156	18	6.9 161001	9	AC068775	AC068775 Homo sapi	c 213	18	6.9 192332	10	AL606745	AL606745 Mouse DNA
c 157	18	6.9 161104	5	AL732499	AL732499 Zebrafish	c 214	18	6.9 192437	5	BK322665	BK322665 Zebrafish
c 158	18	6.9 161402	9	AP003113	AP003113 Homo sapi	c 215	18	6.9 192673	2	AC018870	AC018870 Homo sapi
c 159	18	6.9 161660	2	AC115920	AC115920 Mus muscu	216	18	6.9 193147	2	AC097960	AC097960 Homo sapi
c 160	18	6.9 162386	9	AC113397	AC113397 Homo sapi	217	18	6.9 193553	9	AC097634	AC097634 Homo sapi
c 161	18	6.9 162428	2	BK005112	BK005112 Danto rer	218	18	6.9 194091	9	AP003534	AP003534 Homo sapi
c 162	18	6.9 163209	2	AC007949	AC007949 Homo sapi	219	18	6.9 194813	2	AC100723	AC100723 Homo sapi
c 163	18	6.9 163353	10	AL627076	AL627076 Mouse DNA	c 220	18	6.9 195031	9	AC114325	AC114325 Pan trogl
c 164	18	6.9 163442	2	AC015777	AC015777 Homo sapi	c 221	18	6.9 195323	2	AP003549	AP003549 Homo sapi
c 165	18	6.9 163956	5	AL954708	AL954708 Zebrafish	c 222	18	6.9 195549	9	AC090982	AC090982 Homo sapi
c 166	18	6.9 164763	2	BK470262	BK470262 Danto rer	c 223	18	6.9 195921	8	ATCHR1V81	ATCHR1V81 Homo sapi
c 167	18	6.9 164806	10	AC138715	AC138715 Mus muscu	c 224	18	6.9 196044	2	AC102296	AC102296 Mus muscu
c 168	18	6.9 165617	9	AF165926	AF165926 Homo sapi	c 225	18	6.9 196602	2	AC114248	AC114248 Homo sapi
c 169	18	6.9 165617	2	BK649587	BK649587 Mus muscu	c 226	18	6.9 196766	8	ATCHR1V6	ATCHR1V6 Homo sapi
c 170	18	6.9 167015	2	AC007938	AC007938 Homo sapi	c 227	18	6.9 198281	10	AC122254	AC122254 Mus muscu
c 171	18	6.9 167237	2	AC021971	AC021971 Homo sapi	c 228	18	6.9 198911	2	AC111975	AC111975 Homo sapi
c 172	18	6.9 168124	2	AC024334	AC024334 Homo sapi	c 229	18	6.9 199036	9	AC025449	AC025449 Homo sapi
c 173	18	6.9 168866	8	OSN00023	AL606588 Oryza sat	c 230	18	6.9 199566	9	AC103676	AC103676 Homo sapi
c 174	18	6.9 169162	9	AL138926	AL138926 Human DNA	c 231	18	6.9 200689	2	AC067865	AC067865 Homo sapi
c 175	18	6.9 170116	9	AC087257	AC087257 Homo sapi	c 232	18	6.9 200841	10	AC108830	AC108830 Homo sapi
c 176	18	6.9 170247	2	AC110896	AC110896 Mus muscu	c 233	18	6.9 202188	9	CNS01D1M	AL133961 Human chr
c 177	18	6.9 172036	9	AC046181	AC046181 Homo sapi	c 234	18	6.9 203177	2	AC114678	AC114678 Homo sapi
c 178	18	6.9 172936	2	BK572089	BK572089 Danto rer	c 235	18	6.9 203317	2	AC1021062	AC1021062 Mus muscu
c 179	18	6.9 173226	10	AC132120	AC132120 Mus muscu	c 236	18	6.9 205475	2	AC130033	AC130033 Homo sapi
c 180	18	6.9 174074	2	BK842671	BK842671 Mus muscu	c 237	18	6.9 206093	2	AC108891	AC108891 Bos tauru
c 181	18	6.9 174138	9	AC008871	AC008871 Homo sapi	c 238	18	6.9 206222	2	AC108891	AC108891 Homo sapi
c 182	18	6.9 174646	5	AL929151	AL929151 Zebrafish	c 239	18	6.9 207365	2	AC093653	AC093653 Homo sapi
c 183	18	6.9 177020	2	AC011326	AC011326 Homo sapi	c 240	18	6.9 207695	2	AC097190	AC097190 Homo sapi
c 184	18	6.9 177087	2	AC093687	AC093687 Homo sapi	c 241	18	6.9 210057	10	AC124501	AC124501 Homo sapi
c 185	18	6.9 177344	9	AC073369	AC073369 Mus muscu	c 242	18	6.9 212892	2	AC096822	AC096822 Homo sapi
c 186	18	6.9 178455	2	AC137969	AC137969 Mus muscu	c 243	18	6.9 214146	2	AC096822	AC096822 Homo sapi
c 187	18	6.9 179497	2	BK663521	BK663521 Danto rer	c 244	18	6.9 221070	10	AC026949	AC026949 Homo sapi
c 188	18	6.9 180486	2	AC118051	AC118051 Mus muscu	c 245	18	6.9 223465	2	AC098603	AC098603 Rattus no
c 189	18	6.9 180555	9	AC079384	AC079384 Homo sapi	c 246	18	6.9 223678	2	AC130000	AC130000 Rattus no
c 190	18	6.9 180862	2	AC068917	AC068917 Homo sapi	c 247	18	6.9 225379	2	AC121485	AC121485 Homo sapi
c 191	18	6.9 181315	2	AC147271	AC147271 Pan trogl	c 248	18	6.9 225338	2	AC108577	AC108577 Rattus no
c 192	18	6.9 181460	9	AC090877	AC090877 Homo sapi	c 249	18	6.9 226337	2	AC124813	AC124813 Homo sapi
c 193	18	6.9 181725	2	AC102430	AC102430 Mus muscu	c 250	18	6.9 227182	2	AC099283	AC099283 Homo sapi
c 194	18	6.9 181864	9	AL353743	AL353743 Human DNA	c 251	18	6.9 227411	10	AC130821	AC130821 Homo sapi
c 195	18	6.9 182240	2	AC074201	AC074201 Homo sapi	c 252	18	6.9 228893	2	AC111848	AC111848 Homo sapi
c 196	18	6.9 182504	2	AC146660	AC146660 Orotolmur	c 253	18	6.9 229082	2	AC111600	AC111600 Homo sapi
c 197	18	6.9 182925	2	AC128749	AC128749 Rattus no	c 254	18	6.9 229606	2	AC105519	AC105519 Homo sapi
c 198	18	6.9 183462	5	BK571976	BK571976 Zebrafish	c 255	18	6.9 230155	2	AC114073	AC114073 Homo sapi
c 199	18	6.9 183706	2	BK470078	BK470078 Danto rer	c 256	18	6.9 230444	2	AC117368	AC117368 Homo sapi
c 200	18	6.9 183925	2	AC078870	AC078870 Homo sapi	c 257	18	6.9 230940	10	AC105504	AC105504 Homo sapi
c 201	18	6.9 184317	10	AL606494	AL606494 Mouse DNA	c 258	18	6.9 231746	9	AC011389	AC011389 Homo sapi
c 202	18	6.9 184433	9	AC108479	AC108479 Homo sapi	c 259	18	6.9 232190	2	AC123645	AC123645 Mus muscu
c 203	18	6.9 184600	2	AC117347	AC117347 Rattus no	c 260	18	6.9 232223	2	AC132692	AC132692 Homo sapi
c 204	18					c 261	18				

c 262	18	6.9	23251	2	AC095690	AC095690 Rattus no	319	17	6.5	1838	5	AF223846S3	AF223848 Oncorhynch
c 263	18	6.9	232610	2	AC123157	AC123157 Rattus no	320	17	6.5	1838	5	AF223849S3	AF223851 Oncorhynch
c 264	18	6.9	233574	2	AC098636	AC098636 Rattus no	321	17	6.5	1838	5	AF223852S3	AF223854 Oncorhynch
c 265	18	6.9	237067	2	AC118339	AC118339 Rattus no	322	17	6.5	1838	5	AF223855S3	AF223857 Oncorhynch
c 266	18	6.9	237712	9	AC012634	AC012634 Homo sapi	323	17	6.5	1838	5	AF223856S3	AF223860 Oncorhynch
c 267	18	6.9	239623	2	AC121220	AC121220 Rattus no	324	17	6.5	1838	5	AF223861S3	AF223865 Oncorhynch
c 268	18	6.9	240255	2	BX537326	BX537326 Danio rer	325	17	6.5	1838	5	AF223864S3	AF223866 Oncorhynch
c 269	18	6.9	242384	2	AC105847	AC105847 Rattus no	326	17	6.5	1838	5	AF223867S3	AF223869 Oncorhynch
c 270	18	6.9	242743	2	AC137367	AC137367 Rattus no	327	17	6.5	1838	5	AF223870S3	AF223872 Oncorhynch
c 271	18	6.9	242907	2	AC106660	AC106660 Rattus no	328	17	6.5	1838	5	AF223873S3	AF223875 Oncorhynch
c 272	18	6.9	243768	2	AC125725	AC125725 Rattus no	329	17	6.5	1838	5	AF223876S3	AF223878 Oncorhynch
c 273	18	6.9	244974	2	AC111249	AC111249 Rattus no	330	17	6.5	1838	5	AF223879S3	AF223881 Oncorhynch
c 274	18	6.9	250087	2	AC096831	AC096831 Rattus no	331	17	6.5	1838	5	AF223885S3	AF223887 Oncorhynch
c 275	18	6.9	250337	2	AC098144	AC098144 Rattus no	332	17	6.5	1838	5	AF223888S3	AF223890 Oncorhynch
c 276	18	6.9	251852	2	AC114625	AC114625 Mus muscu	333	17	6.5	1838	5	AF223889S3	AF223892 Oncorhynch
c 277	18	6.9	252129	2	AC133975	AC133975 Rattus no	334	17	6.5	1879	6	BT000241	BT000241 Arabidops
c 278	18	6.9	261938	2	AC105491	AC105491 Rattus no	335	17	6.5	1947	6	AR321206	AR321206 Sequence
c 279	18	6.9	263855	2	AC127797	AC127797 Rattus no	336	17	6.5	2002	8	AY099582	AY099582 Arabidops
c 280	18	6.9	265977	2	AC134623	AC134623 Mus muscu	337	17	6.5	2109	8	BT003163	BT003163 Arabidops
c 281	18	6.9	266574	2	AC087129	AC087129 Mus muscu	338	17	6.5	2159	9	HS026396	HS026396 Arabidops
c 282	18	6.9	267326	2	AC110972	AC110972 Rattus no	339	17	6.5	2247	3	DM066460	DM066460 Arabidops
c 283	18	6.9	269296	2	AC107602	AC107602 Rattus no	340	17	6.5	2318	5	ONHP50L	ONHP50L Arabidops
c 284	18	6.9	271788	2	AC110973	AC110973 Rattus no	341	17	6.5	2534	1	ECRCGB	ECRCGB Arabidops
c 285	18	6.9	276372	2	AC125569	AC125569 Rattus no	342	17	6.5	2551	8	SCPGM1A	SCPGM1A Arabidops
c 286	18	6.9	278227	2	AC128099	AC128099 Rattus no	343	17	6.5	2552	2	AC020498	AC020498 Arabidops
c 287	18	6.9	279666	2	AC130931	AC130931 Rattus no	344	17	6.5	2625	8	AK070975	AK070975 Oryza sat
c 288	18	6.9	280394	3	AE003544	AE003544 Drosophill	345	17	6.5	2671	5	D10636S3	D10638 Oncorhynch
c 289	18	6.9	333192	2	AC113779	AC113779 Rattus no	346	17	6.5	2760	9	HUMLEP0D	HUMLEP0D Homo sapi
c 290	18	6.9	340000	9	AP001718	AP001718 Homo sapi	347	17	6.5	2875	8	AY8383719	AY8383719 Human alpha
c 291	18	6.9	349505	2	AC130443	AC130443 Rattus no	348	17	6.5	3024	10	BC057064	BC057064 Arabidops
c 292	18	6.9	349505	2	AC130443	AC130443 Rattus no	349	17	6.5	3452	3	AY128432	AY128432 Arabidops
c 293	17	6.5	232	6	AR251699	AR251699 Sequence	350	17	6.5	3476	3	BT009935	BT009935 Drosophill
c 294	17	6.5	401	6	AX321179	AX321179 Sequence	351	17	6.5	3577	3	DM005A	DM005A Arabidops
c 295	17	6.5	441	6	AX570166	AX570166 Sequence	352	17	6.5	3618	9	HUMTYRP	HUMTYRP Arabidops
c 296	17	6.5	607	11	BV040243	BV040243 Arabidops	353	17	6.5	3935	8	SCYK127W	SCYK127W Arabidops
c 297	17	6.5	647	8	AJ600965	AJ600965 Arabidops	354	17	6.5	4077	10	BC064438	BC064438 Arabidops
c 298	17	6.5	785	6	BD019595	BD019595 Novel gen	355	17	6.5	4513	10	BC027791	BC027791 Homo sapi
c 299	17	6.5	785	6	BD099533	BD099533 Novel gen	356	17	6.5	4734	9	HS8600826	HS8600826 Arabidops
c 300	17	6.5	785	6	BD186809	BD186809 Nucleic a	357	17	6.5	5355	6	E30079	E30079 Homo sapi
c 301	17	6.5	786	11	BV038169	BV038169 Gnetum gn	358	17	6.5	5355	6	AB011422	AB011422 Homo sapi
c 302	17	6.5	1021	8	GM251559	AJ251559 Murine mRNA	359	17	6.5	5355	9	AB011422	AB011422 Homo sapi
c 303	17	6.5	1146	10	MEF0DA	XJ12801 Murine mRNA	360	17	6.5	5777	8	ATH133743	ATH133743 Arabidops
c 304	17	6.5	1284	5	XEHAND	Z95080 X. laevis mr	361	17	6.5	5830	9	HS8607900	HS8607900 Arabidops
c 305	17	6.5	1593	8	AK070418	AK070418 Oryza sat	362	17	6.5	6497	8	AF159061	AF159061 Oryza sat
c 306	17	6.5	1597	5	BC049424	BC049424 Danio rer	363	17	6.5	6514	9	AF148808	AF148808 Homo sapi
c 307	17	6.5	1597	5	BC053150	BC053150 Homo sapi	364	17	6.5	7172	6	AR218888	AR218888 Arabidops
c 308	17	6.5	1781	9	HS8605147	AL633859 Homo sapi	365	17	6.5	7172	6	BD003800	BD003800 Polynucle
c 309	17	6.5	1837	5	AF223882S3	AF223882 Oncorhynch	366	17	6.5	7672	6	AK724887	AK724887 Sequence
c 310	17	6.5	1838	5	AF223819S3	AF223821 Oncorhynch	367	17	6.5	7672	6	AK780070	AK780070 Sequence
c 311	17	6.5	1838	5	AF223822S3	AF223827 Oncorhynch	368	17	6.5	7672	6	HS083867	HS083867 Human alpha
c 312	17	6.5	1838	5	AF223825S3	AF223830 Oncorhynch	369	17	6.5	7787	6	AX334524	AX334524 Sequence
c 313	17	6.5	1838	5	AF223828S3	AF223833 Oncorhynch	370	17	6.5	7827	9	HUMASPX	HUMASPX Human noner
c 314	17	6.5	1838	5	AF223831S3	AF223836 Oncorhynch	371	17	6.5	10029	1	AE003521	AE003521 Homo sapi
c 315	17	6.5	1838	5	AF223834S3	AF223839 Oncorhynch	372	17	6.5	10189	1	AE005457	AE007457 Streptococ
c 316	17	6.5	1838	5	AF223837S3	AF223842 Oncorhynch	373	17	6.5	10189	1	AE005549	AE005549 Escherich
c 317	17	6.5	1838	5	AF223840S3	AF223845 Oncorhynch	374	17	6.5	10189	1	AE015336	AE015336 Shigella
c 318	17	6.5	1838	5	AF223843S3	AF223848 Oncorhynch	375	17	6.5	10382	1	AE008517	AE008517 Streptococ

c 376	17	6.5	10846	1	AE013394	AE013394 Methanosa	433	17	6.5	83511	8	AB013389	AB013389 Arabidops
c 377	17	6.5	11857	2	AC018239	AC018239 Drosophill	c 434	17	6.5	83557	9	AL138735	AL138735 Human DNA
c 378	17	6.5	14295	1	AE000400	AE000400 Escherich	c 435	17	6.5	84551	3	AC004295	AC004295 Drosophill
c 379	17	6.5	14764	10	AL974311	AL974311 Mouse DNA	c 436	17	6.5	85785	8	ATP21P8	ATP22347 Arabidops
c 380	17	6.5	16697	9	AL591687	AL591687 Human DNA	c 437	17	6.5	90463	8	AP003810	AP003810 Oryza sat
c 381	17	6.5	24139	10	AF463765	AF463765 Mus muscu	c 438	17	6.5	90875	5	AL672192	AL672192 Zebrafish
c 382	17	6.5	24667	9	AF001295	AF001295 Homo sapi	c 439	17	6.5	91025	9	AL3559270	AL3559270 Human DNA
c 383	17	6.5	25464	6	A91686	A91686 Sequence 4	c 440	17	6.5	91059	9	AP003463	AP003463 Homo sapi
c 384	17	6.5	25464	6	AR307527	AR307527 Sequence	c 441	17	6.5	93217	2	AC023171	AC023171 Homo sapi
c 385	17	6.5	25464	6	BD023455	BD023455 Nucleotid	c 442	17	6.5	93586	9	AL590487	AL590487 Human DNA
c 386	17	6.5	26514	2	AC005649	AC005649 Drosophill	c 443	17	6.5	94802	2	SPNEU1913	SPNEU1913 Streptoco
c 387	17	6.5	27503	9	AL160404	AL160404 Human DNA	c 444	17	6.5	94924	2	AL355997	AL355997 Human DNA
c 388	17	6.5	28716	10	AL928795	AL928795 Mouse DNA	c 445	17	6.5	98878	2	AC087108	AC087108 Homo sapi
c 389	17	6.5	30985	8	SPAC961	Z98761 S.pombe chr	c 446	17	6.5	101025	9	AC026934	AC026934 Homo sapi
c 390	17	6.5	31151	2	AC107201_8	Continuation (9 of	c 447	17	6.5	101333	8	AP004030	AP004030 Oryza sat
c 391	17	6.5	31957	3	AC004267	AC004267 Drosophill	c 448	17	6.5	101882	9	AC021089	AC021089 Homo sapi
c 392	17	6.5	32479	2	AC090240	AC090240 Homo sapi	c 449	17	6.5	101923	10	AC138172	AC138172 Mus muscu
c 393	17	6.5	38692	3	AC116919	AC116919 Dictyoste	c 450	17	6.5	102282	9	AL158033	AL158033 Human DNA
c 394	17	6.5	39013	1	AF088896	AF088896 Zymomonas	c 451	17	6.5	102965	2	AC146727	AC146727 Ocotlemur
c 395	17	6.5	39938	9	AL590456	AL590456 Human DNA	c 452	17	6.5	103390	9	AL358533	AL358533 Human DNA
c 396	17	6.5	40699	8	SPBC119	AL022117 S.pombe c	c 453	17	6.5	103479	9	AC140059	AC140059 Homo sapi
c 397	17	6.5	40753	3	BFY18367	Y18367 Branchiosto	c 454	17	6.5	103523	9	AL590408	AL590408 Human DNA
c 398	17	6.5	45014	2	AC147003	AC147003 Homo sapi	c 455	17	6.5	105070	8	AP006352	AP006352 Lotus cor
c 399	17	6.5	45472	3	CEY59A8A	AL132895 Caenorhab	c 456	17	6.5	105600	8	AP005173	AP005173 Oryza sat
c 400	17	6.5	51648	2	AC015434	AC015434 Drosophill	c 457	17	6.5	105695	2	BX571758	BX571758 Dario rer
c 401	17	6.5	51860	10	AL808109	AL808109 Mouse DNA	c 458	17	6.5	106961	2	AC119411	AC119411 Medicago
c 402	17	6.5	52417	9	AC114777	AC114777 Homo sapi	c 459	17	6.5	106975	8	OSDN00045	OSDN00045 Oryza sat
c 403	17	6.5	53411	2	AC087287	AC087287 Homo sapi	c 460	17	6.5	107025	2	AL139235_3	AL139235 Homo sapi
c 404	17	6.5	55543	9	AL139152	AL139152 Human DNA	c 461	17	6.5	109685	9	AC024578	AC024578 Continuation (4 of
c 405	17	6.5	55687	9	AC079464	AC079464 Homo sapi	c 462	17	6.5	110000	1	ECOM67_1	ECOM67_1 Continuation (2 of
c 406	17	6.5	57198	2	AL590046_3	Continuation (4 of	c 463	17	6.5	110000	2	AC101676_2	AC101676_2 Continuation (3 of
c 407	17	6.5	58190	9	HS498124	AL031057 Human DNA	c 464	17	6.5	110000	2	AC107201_7	AC107201_7 Continuation (8 of
c 408	17	6.5	58449	10	AL929218	AL929218 Mouse DNA	c 465	17	6.5	110000	2	AC112131_0	AC112131_0 Continuation (3 of
c 409	17	6.5	59219	2	AC090385	AC090385 Homo sapi	c 466	17	6.5	110000	2	AC113868_2	AC113868_2 Continuation (3 of
c 410	17	6.5	59303	8	AP004555	AP004555 Lotus cor	c 467	17	6.5	110000	2	AC116279_0	AC116279_0 Continuation (3 of
c 411	17	6.5	61150	2	AC100284	AC100284 Mus muscu	c 468	17	6.5	110000	2	AC118411_0	AC118411_0 Continuation (3 of
c 412	17	6.5	61725	2	AC100105	AC100105 Mus muscu	c 469	17	6.5	110000	2	AC120762_2	AC120762_2 Continuation (3 of
c 413	17	6.5	62219	2	AC120844	AC120844 Mus muscu	c 470	17	6.5	110000	2	AC123241_1	AC123241_1 Continuation (3 of
c 414	17	6.5	63268	2	AC103683	AC103683 Homo sapi	c 471	17	6.5	110000	2	AC132794_2	AC132794_2 Continuation (2 of
c 415	17	6.5	63268	2	AC103683	AC103683 Homo sapi	c 472	17	6.5	110000	2	AC141403_1	AC141403_1 Continuation (3 of
c 416	17	6.5	64139	9	AL069064	AL069064 Homo sapi	c 473	17	6.5	110000	2	AL139235_2	AL139235_2 Continuation (3 of
c 417	17	6.5	64208	9	AL2929000	AL2929000 Human DNA	c 474	17	6.5	110000	2	BX294176_1	BX294176_1 Continuation (2 of
c 418	17	6.5	64786	2	AC017805	AC017805 Drosophill	c 475	17	6.5	110000	2	PFPA113_01	PFPA113_01 Continuation (3 of
c 419	17	6.5	64849	2	AC113037	AC113037 Mus muscu	c 476	17	6.5	110000	2	AL359675	AL359675 Continuation (2 of
c 420	17	6.5	65014	2	AC100176	AC100176 Mus muscu	c 477	17	6.5	110901	9	AL359183	AL359183 Human DNA
c 421	17	6.5	66137	2	AC101526	AC101526 Mus muscu	c 478	17	6.5	110999	9	AL365201	AL365201 Human DNA
c 422	17	6.5	66310	2	AC135728	AC135728 Homo sapi	c 479	17	6.5	114026	9	AC138157	AC138157 Continuation (5 of
c 423	17	6.5	69514	9	AY129465_4	Continuation (5 of	c 480	17	6.5	114626	4	AC124954	AC124954 Continuation (2 of
c 424	17	6.5	71380	9	AC092605	AC092605 Homo sapi	c 481	17	6.5	115040	8	AC146806	AC146806 Medicago
c 425	17	6.5	72591	2	AC090864	AC090864 Homo sapi	c 482	17	6.5	115424	2	AP002076	AP002076 Homo sapi
c 426	17	6.5	73184	2	AC090864	AC090864 Homo sapi	c 483	17	6.5	117217	9	HS117P19	HS117P19 Human DNA
c 427	17	6.5	78054	3	AC004296	AC004296 Drosophill	c 484	17	6.5	117911	9	AC090152	AC090152 Homo sapi
c 428	17	6.5	78643	3	AC004352	AC004352 Drosophill	c 485	17	6.5	118755	9	AC004903	AC004903 Homo sapi
c 429	17	6.5	81147	9	AL606504	AL606504 Human DNA	c 486	17	6.5	118869	9	AC098860	AC098860 Homo sapi
c 430	17	6.5	81476	10	BX004788	BX004788 Mouse DNA	c 487	17	6.5	119491	9	AC108051	AC108051 Homo sapi
c 431	17	6.5	82064	2	AC006937	AC006937 Drosophill	c 488	17	6.5	120562	8	AY268139	AY268139 Hordeum v
c 432	17	6.5	83490	8	AP004039	AP004039 Oryza sat	c 489	17	6.5	120562	8	AY268139	AY268139 Hordeum v

490	17	6.5	120625	2	AC017563	AC017563 Drosophila	547	17	6.5	145913	2	AP005821	AP005821 Oryza sat
491	17	6.5	121141	10	AC125314	AC125314 Mus muscu	548	17	6.5	145947	9	AL353580	AL353588 Human DNA
492	17	6.5	122681	9	AC006062	AC006062 Homo sapi	549	17	6.5	146170	2	AC079224	AC079224 Homo sapi
493	17	6.5	123386	8	F12F1	AC002131 Arabidops	550	17	6.5	146275	2	AC080119	AC080119 Homo sapi
494	17	6.5	124214	9	AL807246	AL807246 Human DNA	551	17	6.5	146396	10	AL929449	AL929449 Mouse DNA
495	17	6.5	125439	9	AC138990	AC138990 Homo sapi	552	17	6.5	146468	2	AC181626	AC181626 Rattus no
496	17	6.5	125527	9	AL353133	AL353133 Human DNA	553	17	6.5	146690	2	AC102254	AC102254 Mus muscu
497	17	6.5	125760	2	AC080122	AC080122 Homo sapi	554	17	6.5	146810	9	AC084706	AC084706 Homo sapi
498	17	6.5	125785	9	AC107393	AC107393 Homo sapi	555	17	6.5	146952	9	AC068522	AC068522 Homo sapi
499	17	6.5	125973	2	AC010353	AC010353 Homo sapi	556	17	6.5	147008	2	AC138980	AC138980 Homo sapi
500	17	6.5	127178	9	AC005160	AC005160 Homo sapi	557	17	6.5	147177	2	AC138981	AC138981 Homo sapi
501	17	6.5	127472	2	AC124962	AC124962 Medicago	558	17	6.5	148003	2	BX37320	BX37320 Dantio rer
502	17	6.5	128016	2	AC138131	AC138131 Medicago	559	17	6.5	149085	2	AC123364	AC123364 Rattus no
503	17	6.5	128218	2	AC121096	AC121096 Mus muscu	560	17	6.5	149143	2	AC092974	AC092974 Homo sapi
504	17	6.5	128751	5	BX649586	BX649586 Zebrafish	561	17	6.5	149428	2	AC010264	AC010264 Homo sapi
505	17	6.5	128965	9	AL357562	AL357562 Human DNA	562	17	6.5	149559	9	AL139327	AL139327 Human DNA
506	17	6.5	129083	2	AC096853	AC096853 Sus scrofa	563	17	6.5	149901	2	AC022243	AC022243 Homo sapi
507	17	6.5	129984	9	AC115620	AC115620 Homo sapi	564	17	6.5	150026	2	AL189868	AL189868 Homo sapi
508	17	6.5	130361	10	AL929546	AL929546 Mouse DNA	565	17	6.5	150096	2	AC117562	AC117562 Mus muscu
509	17	6.5	130586	2	AC073238	AC073238 Homo sapi	566	17	6.5	150350	9	CNS01DW	AL138533 Human chr
510	17	6.5	130632	2	AC004547	AC004547 Homo sapi	567	17	6.5	150355	9	HSJ364H0	AC093680 Homo sapi
511	17	6.5	131704	2	AP004313	AP004313 Oryza sat	568	17	6.5	150399	9	AC093680	AC093680 Homo sapi
512	17	6.5	132200	2	AL161619	AL161619 Homo sapi	569	17	6.5	150400	10	AC122911	AC122911 Mus muscu
513	17	6.5	132782	8	AC120983	AC120983 Oryza sat	570	17	6.5	150887	2	AC018580	AC018580 Homo sapi
514	17	6.5	132827	8	AC079890	AC079890 Oryza sat	571	17	6.5	151203	8	CNS0594W	BX55875 Oryza sat
515	17	6.5	133157	9	AC109351	AC109351 Homo sapi	572	17	6.5	151319	9	AC108036	AC108036 Homo sapi
516	17	6.5	133330	10	AL928871	AL928871 Mouse DNA	573	17	6.5	151540	2	AL772252	AP001766 Homo sapi
517	17	6.5	133513	9	B5000023	B5000023 Pan trogl	574	17	6.5	151696	2	AP001766	AL096868 Human DNA
518	17	6.5	136164	3	AC099006	AC099006 Drosophila	575	17	6.5	152454	2	AC067909	AC067909 Homo sapi
519	17	6.5	136551	9	AC123786	AC123786 Homo sapi	576	17	6.5	152464	9	AC023473	AC023473 Homo sapi
520	17	6.5	136501	9	AC073626	AC073626 Homo sapi	577	17	6.5	152081	9	AC007381	AC067909 Homo sapi
521	17	6.5	136906	2	RN86120	AL603805 Rattus no	578	17	6.5	152454	2	AC067909	AL603805 Rattus no
522	17	6.5	137289	9	AC022828	AL928712 Zebrafish	579	17	6.5	153064	8	CNS08CAL	AC067909 Homo sapi
523	17	6.5	137441	5	AL928712	AP004780 Oryza sat	580	17	6.5	153155	2	AC060783	AC060783 Oryza sat
524	17	6.5	137445	2	AP004780	AP005634 Oryza sat	581	17	6.5	153319	2	AC136027	AC136027 Mus muscu
525	17	6.5	137985	2	AP005634	AL137793 Human DNA	582	17	6.5	153402	9	HS247E2	AL173536 Mus muscu
526	17	6.5	138419	9	AL137793	BX571896 Dantio rer	583	17	6.5	153533	2	AC124338	AL173536 Mus muscu
527	17	6.5	138769	2	BX571896	AL049564 Human DNA	584	17	6.5	154016	2	AC091311	AL049564 Human DNA
528	17	6.5	139033	9	HSJ080804	AL353761 Homo sapi	585	17	6.5	154123	2	AC025831	AC025831 Homo sapi
529	17	6.5	140606	2	AL353761	BX510917 Dantio rer	586	17	6.5	154417	2	AC102530	AC102530 Mus muscu
530	17	6.5	140680	2	BX510917	AL645843 Mouse DNA	587	17	6.5	154455	2	AC021844	AC021844 Mus muscu
531	17	6.5	141889	2	AC032006	AC068890 Homo sapi	588	17	6.5	154604	5	AL934739	AL934739 Zebrafish
532	17	6.5	142021	10	AL645843	AC073286 Homo sapi	589	17	6.5	154753	2	AC020605	AC020605 Homo sapi
533	17	6.5	142123	2	AC068890	BX855398 Dantio rer	590	17	6.5	154758	9	AC112491	AC112491 Homo sapi
534	17	6.5	142353	2	AC073286	AC025453 Homo sapi	591	17	6.5	155326	9	CNS07E2	AC092328 Homo sapi
535	17	6.5	142911	2	BX855398	AC079855 Homo sapi	592	17	6.5	156142	3	AC091228	AC091228 Homo sapi
536	17	6.5	142959	2	AC025453	AC016572 Homo sapi	593	17	6.5	156190	2	AC097651	AC097651 Homo sapi
537	17	6.5	143146	9	AC079855	AL954190 Zebrafish	594	17	6.5	156332	10	AC116581	AC116581 Mus muscu
538	17	6.5	143687	9	AC016572	AC069027 Homo sapi	595	17	6.5	157067	2	AC137265	AC137265 Rattus no
539	17	6.5	144062	5	AL954190	AC138897 Mus muscu	596	17	6.5	157393	2	AC036212	AC036212 Dantio rer
540	17	6.5	144631	9	AC069027	AC145841 Macroptus	597	17	6.5	157747	2	BX323068	BX323068 Homo sapi
541	17	6.5	144649	2	AC145841	AC090261 Homo sapi	598	17	6.5	157816	9	AC093666	AC093666 Homo sapi
542	17	6.5	144879	2	AC138897	AC005599 Homo sapi	599	17	6.5	157816	9	AC093666	AC093666 Homo sapi
543	17	6.5	145085	2	AC090261	BX322794 Dantio rer	600	17	6.5	157816	9	AC093666	AC093666 Homo sapi
544	17	6.5	145173	9	AC005599	BX322794 Dantio rer	601	17	6.5	157816	9	AC093666	AC093666 Homo sapi
545	17	6.5	145629	2	BX322794	BX322794 Dantio rer	602	17	6.5	157816	9	AC093666	AC093666 Homo sapi
546	17	6.5	145829	2	BX571953	BX571953 Dantio rer	603	17	6.5	157816	9	AC093666	AC093666 Homo sapi

604	17	6.5	157949	9	AL355578	AL355578 Human DNA	c 661	17	6.5	168197	9	AC023307	AC023307 Homo sapi
605	17	6.5	158600	2	BX296541	BX296541 Dantio rer	c 662	17	6.5	168306	3	AC008135	AC008135 Drosophila
606	17	6.5	158684	2	AC079493	AC079493 Mus muscu	c 663	17	6.5	168431	2	BX470138	BX470138 Dantio rer
607	17	6.5	158830	10	AC131740	AC131740 Mus muscu	c 664	17	6.5	168843	2	AC091711	AC091711 Rattus no
c 608	17	6.5	159013	2	BX323995	BX323995 Dantio rer	c 665	17	6.5	168966	2	AC015785	AC015785 Homo sapi
c 609	17	6.5	159024	2	AC025495	AC025495 Homo sapi	c 666	17	6.5	169083	2	AL355346	AL355346 Homo sapi
c 610	17	6.5	159188	2	AC037432	AC037432 Homo sapi	c 667	17	6.5	169479	2	BX890540	BX890540 Dantio rer
c 611	17	6.5	159242	2	AC078800	AC078800 Homo sapi	c 668	17	6.5	169557	9	AC024706	AC024706 Homo sapi
c 612	17	6.5	159300	9	HS279E22	AL662879 Homo sapi	c 669	17	6.5	169570	5	AL928999	AL928999 Zebrafish
c 613	17	6.5	159331	9	AL589741	AL589741 Human DNA	c 670	17	6.5	169628	5	BX322567	BX322567 Zebrafish
c 614	17	6.5	160002	5	BX000446	BX000446 Zebrafish	c 671	17	6.5	170001	9	HS45P21	AL021917 Human DNA
c 615	17	6.5	160069	2	AC064870	AC064870 Homo sapi	c 672	17	6.5	170311	9	AC021701	AC021701 Homo sapi
c 616	17	6.5	160197	2	AC115700	AC115700 Mus muscu	c 673	17	6.5	170625	2	AC144620	AC144620 Mus muscu
c 617	17	6.5	160302	9	AC010685	AC010685 Homo sapi	c 674	17	6.5	170682	2	AC021245	AC021245 Homo sapi
c 618	17	6.5	160624	2	AC144418	AC144418 Rattus no	c 675	17	6.5	170817	9	AL513166	AL513166 Homo sapi
c 619	17	6.5	161054	2	AC123744	AC123744 Mus muscu	c 676	17	6.5	170849	2	AC109803	AC109803 Homo sapi
c 620	17	6.5	161364	2	AC068637	AC068637 Homo sapi	c 677	17	6.5	170923	2	AC110042	AC110042 Mus muscu
c 621	17	6.5	161638	9	AC107934	AC107934 Homo sapi	c 678	17	6.5	171206	2	AC026573	AC026573 Homo sapi
c 622	17	6.5	161672	2	AC136667	AC136667 Rattus no	c 679	17	6.5	171375	3	AC007082	AC007082 Homo sapi
c 623	17	6.5	162046	2	AC127375	AC127375 Mus muscu	c 680	17	6.5	171686	9	AC142284	AC142284 Pan trogl
c 624	17	6.5	162075	9	HS127D3	AL021026 Human DNA	c 681	17	6.5	171721	9	AC022821	AC022821 Homo sapi
c 625	17	6.5	162151	9	AL138753	AL138753 Human DNA	c 682	17	6.5	171742	2	BX897662	BX897662 Dantio rer
c 626	17	6.5	162411	2	AC147061	AC147061 Pan trogl	c 683	17	6.5	171887	2	AL356355	AL356355 Homo sapi
c 627	17	6.5	162880	2	AC120363	AC120363 Mus muscu	c 684	17	6.5	171930	2	AC118687	AC118687 Mus muscu
c 628	17	6.5	162922	2	AC011281	AC011281 Homo sapi	c 685	17	6.5	172018	2	AC107672	AC107672 Mus muscu
c 629	17	6.5	162995	10	AL663032	AL663032 Mouse DNA	c 686	17	6.5	172475	9	AC025613	AC025613 Homo sapi
c 630	17	6.5	163066	2	AC116506	AC116506 Mus muscu	c 687	17	6.5	172606	9	AL358953	AL358952 Human DNA
c 631	17	6.5	163110	2	AC068705	AC068705 Homo sapi	c 688	17	6.5	173031	9	AL359853	AL359853 Homo sapi
c 632	17	6.5	163231	9	AL162575	AL162575 Human DNA	c 689	17	6.5	173047	2	AC120413	AC120413 Mus muscu
c 633	17	6.5	163357	2	AC023276	AC023276 Homo sapi	c 690	17	6.5	173177	2	AC102661	AC102661 Mus muscu
c 634	17	6.5	163404	2	AC118883	AC118883 Rattus no	c 691	17	6.5	173415	9	CNS01DVS	AC102661 Mus muscu
c 635	17	6.5	163443	5	AL773542	AL773542 Zebrafish	c 692	17	6.5	173564	5	BX470230	BX470230 Zebrafish
c 636	17	6.5	163706	2	AL354927	AL354927 Homo sapi	c 693	17	6.5	173756	2	AC134948	AC134948 Homo sapi
c 637	17	6.5	163712	9	AC004065	AC004065 Homo sapi	c 694	17	6.5	173769	10	AL669819	AL669819 Mouse DNA
c 638	17	6.5	164007	2	AC069218	AC069218 Homo sapi	c 695	17	6.5	173911	9	AL354992	AL354992 Human DNA
c 639	17	6.5	164118	2	AC021384	AC021384 Homo sapi	c 696	17	6.5	173966	2	AC138365	AC138365 Mus muscu
c 640	17	6.5	164278	2	AC073126	AC073126 Homo sapi	c 697	17	6.5	173987	10	AL670250	AL670250 Mouse DNA
c 641	17	6.5	164799	2	BX511121	BX511121 Dantio rer	c 698	17	6.5	174151	10	AL672050	AL672050 Mouse DNA
c 642	17	6.5	165011	9	AL445255	AL445255 Human DNA	c 699	17	6.5	174171	2	AC134519	AC134519 Homo sapi
c 643	17	6.5	165089	9	AC021646	AC021646 Homo sapi	c 700	17	6.5	174286	2	AC116795	AC116795 Mus muscu
c 644	17	6.5	165768	2	AC023517	AC023517 Homo sapi	c 701	17	6.5	174301	5	AL845287	AL845287 Zebrafish
c 645	17	6.5	165798	2	AC117794	AC117794 Mus muscu	c 702	17	6.5	174347	10	AL928956	AL928956 Homo sapi
c 646	17	6.5	166007	9	CNS01DRC	AL117186 Human chr	c 703	17	6.5	174473	5	AL928514	AL928514 Mouse DNA
c 647	17	6.5	166071	9	AC022336	AC022336 Homo sapi	c 704	17	6.5	174530	9	AC009166	AC009166 Homo sapi
c 648	17	6.5	166168	2	AC115193	AC115193 Rattus no	c 705	17	6.5	174638	10	AL670290	AL670290 Mouse DNA
c 649	17	6.5	166174	2	AC009633	AC009633 Homo sapi	c 706	17	6.5	174700	2	AC025344	AC025344 Homo sapi
c 650	17	6.5	166231	9	AL773537	AL773537 Human DNA	c 707	17	6.5	174741	2	AC073119	AC073119 Homo sapi
c 651	17	6.5	166525	9	AC022413	AC022413 Homo sapi	c 708	17	6.5	174775	5	BX284691	BX284691 Zebrafish
c 652	17	6.5	166531	2	BX890591	BX890591 Dantio rer	c 709	17	6.5	175380	2	AL512411	AL512411 Homo sapi
c 653	17	6.5	166651	4	AC087160	AC087160 Sus scrofa	c 710	17	6.5	175584	9	CNS07EFV	AL583742 Human chr
c 654	17	6.5	166716	9	AC108482	AC108482 Homo sapi	c 711	17	6.5	175666	9	AL356481	AL356481 Homo sapi
c 655	17	6.5	167162	2	AC139872	AC139872 Rattus no	c 712	17	6.5	176097	9	AL591438	AL591438 Human DNA
c 656	17	6.5	167214	2	AC096202	AC096202 Rattus no	c 713	17	6.5	176233	10	AL732417	AL732417 Mouse DNA
c 657	17	6.5	167853	2	AP001798	AP001798 Homo sapi	c 714	17	6.5	176313	2	AC027737	AC027737 Homo sapi
c 658	17	6.5	167974	9	AL591073	AL591073 Human DNA	c 715	17	6.5	176243	2	AC145095	AC145095 Homo sapi
c 659	17	6.5	168043	2	AC011935	AC011935 Homo sapi	c 716	17	6.5	176248	9	AC007498	AC007498 Homo sapi
c 660	17	6.5	168108	9	AL445687	AL445687 Human DNA	c 717	17	6.5	176267	9	AC113420	AC113420 Homo sapi

c 718	17	6.5 176350	2	AC092513	Paipio anu
c 719	17	6.5 176863	2	AL358353	Homo sapi
c 720	17	6.5 177083	3	AC008285	Drosophila
c 721	17	6.5 177112	9	AC002452	Homo sapi
c 722	17	6.5 177145	2	AC113156	Homo sapi
c 723	17	6.5 177202	2	AC118703	Mus muscu
c 724	17	6.5 177528	2	AC093444	Pen trogl
c 725	17	6.5 177599	2	AC097630	Sus scrofa
c 726	17	6.5 177797	2	AC140039	Mus muscu
c 727	17	6.5 178212	2	AC103326	Homo sapi
c 728	17	6.5 178311	9	AC104795	Homo sapi
c 729	17	6.5 178742	2	AC134807	Rattus no
c 730	17	6.5 179269	9	AC093627	Homo sapi
c 731	17	6.5 179270	9	AC104580	Homo sapi
c 732	17	6.5 179437	5	AL928892	Zebrafish
c 733	17	6.5 179767	2	AC114584	Mus muscu
c 734	17	6.5 180000	2	AC004578	Homo sapi
c 735	17	6.5 180104	9	DJ526N18	Homo sapi
c 736	17	6.5 180166	2	AC011898	Homo sapi
c 737	17	6.5 180179	2	AC018881	Homo sapi
c 738	17	6.5 180273	2	AP002894	Homo sapi
c 739	17	6.5 180359	2	AC022064	Homo sapi
c 740	17	6.5 180534	2	CNS08CB7	Oryza sat
c 741	17	6.5 180766	9	AC090691	Homo sapi
c 742	17	6.5 180947	2	AC128079	Homo sapi
c 743	17	6.5 180995	9	AC117500	Homo sapi
c 744	17	6.5 181033	10	AL731663	Mus muscu
c 745	17	6.5 181036	9	AC087683	Homo sapi
c 746	17	6.5 181124	2	AP002390	Homo sapi
c 747	17	6.5 181174	2	AC112626	Rattus no
c 748	17	6.5 181294	2	AC024172	Homo sapi
c 749	17	6.5 181384	10	AL732508	Mus muscu
c 750	17	6.5 181407	2	AC113433	Rattus no
c 751	17	6.5 181567	9	AL845426	Human DNA
c 752	17	6.5 181910	10	AL672179	Mouse DNA
c 753	17	6.5 182019	9	AC007077	Homo sapi
c 754	17	6.5 182087	2	AC055790	Homo sapi
c 755	17	6.5 182556	9	AC016879	Homo sapi
c 756	17	6.5 182643	2	AP002794	Homo sapi
c 757	17	6.5 182725	2	AC145747	Mus muscu
c 758	17	6.5 182725	2	AC021206	Homo sapi
c 759	17	6.5 182752	2	BX510936	Danio rer
c 760	17	6.5 182871	3	AC117176	Drosophila
c 761	17	6.5 182897	3	AC092232	Homo sapi
c 762	17	6.5 183190	2	AC093927	Homo sapi
c 763	17	6.5 183558	2	AC032021	Homo sapi
c 764	17	6.5 183684	2	AL162715	Homo sapi
c 765	17	6.5 183707	10	AC124384	Mus muscu
c 766	17	6.5 183772	2	AC138045	Sus scrofa
c 767	17	6.5 183807	9	AC068313	Homo sapi
c 768	17	6.5 183855	2	AC133413	Rattus no
c 769	17	6.5 184396	9	AC105424	Homo sapi
c 770	17	6.5 184430	10	AC115811	Mus muscu
c 771	17	6.5 184444	2	BX649509	Mus muscu
c 772	17	6.5 184635	2	AC025445	Homo sapi
c 773	17	6.5 184791	2	AC124360	Mus muscu
c 774	17	6.5 184791	2	AC124360	Mus muscu
c 775	17	6.5 184861	2	BX296527	Danio rer
c 776	17	6.5 185029	9	AC090707	Homo sapi
c 777	17	6.5 185116	9	AC005823	Homo sapi
c 778	17	6.5 185123	2	AC053524	Homo sapi
c 779	17	6.5 185135	5	BX005248	Zebrafish
c 780	17	6.5 185320	8	AP006101	Lotus cor
c 781	17	6.5 185333	2	AC113288	Mus muscu
c 782	17	6.5 185623	2	AC137058	Paipio anu
c 783	17	6.5 185652	9	AC007312	Homo sapi
c 784	17	6.5 185680	10	AC131751	Mus muscu
c 785	17	6.5 185693	2	AC128182	Rattus no
c 786	17	6.5 185791	9	AC098861	Homo sapi
c 787	17	6.5 186044	2	AC087674	Homo sapi
c 788	17	6.5 186239	2	AC123982	Pen trogl
c 789	17	6.5 186285	2	AC140098	Sus scrofa
c 790	17	6.5 186369	9	AC044814	Homo sapi
c 791	17	6.5 186687	9	AC134943	Homo sapi
c 792	17	6.5 186765	2	AC015692	Homo sapi
c 793	17	6.5 186780	9	AC005740	Homo sapi
c 794	17	6.5 186798	10	AC140980	Mus muscu
c 795	17	6.5 187081	2	AC110735	Mus muscu
c 796	17	6.5 187136	9	AC114316	Mus muscu
c 797	17	6.5 187349	2	AC137270	Mus muscu
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c 800	17	6.5 187914	2	AC141124	Rattus no
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c 813	17	6.5 189315	10	AL606508	Mouse DNA
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c 815	17	6.5 189720	2	AC140866	Homo sapi
c 816	17	6.5 189748	2	AC140866	Homo sapi
c 817	17	6.5 189854	9	AC093686	Homo sapi
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c 823	17	6.5 190842	2	AC006235	Homo sapi
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c 840	17	6.5 193507	2	AC139762	AC139762 Mus muscu	c 897	17	6.5 204352	2	AC124526	AC124526 Mus muscu
c 841	17	6.5 193886	2	AC130783	AC130783 Pan trogl	c 898	17	6.5 204366	2	AC118181	AC118181 Rattus no
c 842	17	6.5 194437	2	AC117948	AC117948 Homo sapi	c 899	17	6.5 204937	2	AC105639	AC105639 Rattus no
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c 844	17	6.5 194474	2	AC137536	AC137536 Sus scrof	c 901	17	6.5 205521	2	AC146097	AC146097 Pan trogl
c 845	17	6.5 194509	8	AP001129	AP001129 Oryza sat	c 902	17	6.5 205757	10	AL844855	AL844855 Mouse DNA
c 846	17	6.5 194589	9	AC091211	AC091211 Drosophil	c 903	17	6.5 206476	2	AC112776	AC112776 Homo sapi
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c 857	17	6.5 197479	2	AL954715	AL954715 Danto rer	c 914	17	6.5 210255	2	AC114593	AC114593 Mus muscu
c 858	17	6.5 197547	2	AC013494	AC013494 Homo sapi	c 915	17	6.5 210476	10	AC087166	AC087166 Mus muscu
c 859	17	6.5 197721	5	AL954771	AL954771 Zebrafish	c 916	17	6.5 210754	2	AC110964	AC110964 Rattus no
c 860	17	6.5 197889	10	AC121611	AC121611 Mus muscu	c 917	17	6.5 211456	10	AL928926	AL928926 Mouse DNA
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c 862	17	6.5 198401	2	AC107803	AC107803 Mus muscu	c 919	17	6.5 211812	2	AC027205	AC027205 Homo sapi
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c 864	17	6.5 198489	2	AC100820	AC100820 Homo sapi	c 921	17	6.5 211969	10	AL671970	AL671970 Mouse DNA
c 865	17	6.5 198583	2	AC144702	AC144702 Danto rer	c 922	17	6.5 212012	2	AC138027	AC138027 Mus muscu
c 866	17	6.5 198586	9	AC079789	AC079789 Homo sapi	c 923	17	6.5 212353	2	AC128241	AC128241 Rattus no
c 867	17	6.5 198822	2	AC110577	AC110577 Mus muscu	c 924	17	6.5 212455	10	EX539333	EX539333 Mouse DNA
c 868	17	6.5 199104	5	AL929266	AL929266 Zebrafish	c 925	17	6.5 212539	2	AC128241	AC128241 Rattus no
c 869	17	6.5 199199	8	ATCHR159	ATCHR159 Arabidops	c 926	17	6.5 213043	2	AC130475	AC130475 Mus muscu
c 870	17	6.5 199271	2	AC142243	AC142243 Mus muscu	c 927	17	6.5 213045	2	AC093640	AC093640 Homo sapi
c 871	17	6.5 199626	2	AC112244	AC112244 Homo sapi	c 928	17	6.5 213124	2	AC117157	AC117157 Rattus no
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c 873	17	6.5 199670	5	EX000534	EX000534 Zebrafish	c 930	17	6.5 214520	2	AC112617	AC112617 Rattus no
c 874	17	6.5 199838	2	AC107821	AC107821 Mus muscu	c 931	17	6.5 214788	2	AC147287	AC147287 Pan trogl
c 875	17	6.5 199908	2	AC111316	AC111316 Rattus no	c 932	17	6.5 214847	2	AC098980	AC098980 Rattus no
c 876	17	6.5 199996	2	AC102649	AC102649 Mus muscu	c 933	17	6.5 215756	10	AC087889	AC087889 Mus Muscu
c 877	17	6.5 200133	2	EX510333	EX510333 Danto rer	c 934	17	6.5 215972	2	AC119543	AC119543 Rattus no
c 878	17	6.5 200599	2	EX548248	EX548248 Danto rer	c 935	17	6.5 216428	2	AC134900	AC134900 Mus muscu
c 879	17	6.5 201000	9	AC105150	AC105150 Homo sapi	c 936	17	6.5 216884	2	AC134900	AC134900 Rattus no
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c 881	17	6.5 201419	10	AL808106	AL808106 Mouse DNA	c 938	17	6.5 217333	2	AC130723	AC130723 Mus muscu
c 882	17	6.5 201564	9	AC099054	AC099054 Homo sapi	c 939	17	6.5 217960	2	AC128963	AC128963 Rattus no
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c 885	17	6.5 201973	2	AC017049	AC017049 Homo sapi	c 942	17	6.5 218601	2	EX649377	EX649377 Danto rer
c 886	17	6.5 202010	2	AC136558	AC136558 Rattus no	c 943	17	6.5 218614	2	AC123243	AC123243 Rattus no
c 887	17	6.5 202027	2	AC120196	AC120196 Gallus ga	c 944	17	6.5 219340	10	AL670771	AL670771 Mouse DNA
c 888	17	6.5 202350	2	AC138257	AC138257 Mus muscu	c 945	17				

c 946	17	6.5	219532	2	AC125395	AC125395 Mus muscu
c 947	17	6.5	219568	10	AL844840	AL844840 Mouse DNA
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c 949	17	6.5	219698	2	AC124824	AC124824 Mus muscu
c 950	17	6.5	219713	2	AC132225	AC132225 Mus muscu
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c 952	17	6.5	220676	2	AC113042	AC113042 Mus muscu
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c 971	17	6.5	224732	2	AC103114	AC103114 Rattus no
c 972	17	6.5	224853	2	AC093610	AC093610 Rattus no
c 973	17	6.5	224910	3	AE003761	AE003761 Drosophi1
c 974	17	6.5	225011	2	AC117092	AC117092 Rattus no
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c 980	17	6.5	226328	2	AC109575	AC109575 Rattus no
c 981	17	6.5	226351	2	AC106508	AC106508 Rattus no
c 982	17	6.5	226398	2	BX511306	BX511306 Dantio rer
c 983	17	6.5	226458	2	BX664616	BX664616 Dantio rer
c 984	17	6.5	226567	10	AC093316	AC093316 Mus muscu
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c 994	17	6.5	228296	2	AL831751	AL831751 Mus muscu
c 995	17	6.5	228352	2	AC132632	AC132632 Rattus no
c 996	17	6.5	229155	9	AC018755	AC018755 Homo sapi
c 997	17	6.5	229391	2	AC105823	AC105823 Homo sapi
c 998	17	6.5	229519	2	AC095176	AC095176 Rattus no
c 999	17	6.5	229561	2	AC120067	AC120067 Rattus no
c 1000	17	6.5	229639	5	AC140947	AC140947 Gallus ga

# ALIGNMENTS

RESULT 1	BD245277	261 bp	DNA	linear	PAT 17-JUL-2003
LOCUS	BD245277				
DEFINITION	Development of novel antibiotics based on bacteriophage genomes.				
ACCESSION	BD245277.1	GI:33055047			
VERSION	BD245277.1	GI:33055047			
KEYWORDS	JP 2002531107-A/12.				
SOURCE	unidentified				
ORGANISM	unclassified.				
REFERENCE	1 (bases 1 to 261)				
AUTHORS	Pelletier,J., Gros,P. and Dubow,M.				
TITLE	Development of novel antibiotics based on bacteriophage genomes				
JOURNAL	Patent: JP 2002531107-A 12 24-SEP-2002;				
PHARTECH INC					
COMMENT	OS Staphylococcus aureus bacteriophage 77				
PN	JP 2002531107-A/12				
PD	24-SEP-2002				
PF	03-DEC-1999 JP 2000585456				
PR	03-DEC-1998 US 60/110992,03-JUN-1999 US 09/326144 PR				
28-SEP-1999 US 09/407804,30-SEP-1999 US 60/157218 PR					
01-DEC-1999 US 60/168777,02-DEC-1999 US 09/454232 PT JERRY					
PELLETIER,PHILIPPE GROS,MICHAEL DUBOW					
PC C12N15/09,A01N63/00,A61K38/00,A61K45/00,A61P31/04,C07K14/005,					
PC C12M1/00,					
PC C12N15/00,C12Q1/02,C12Q1/68,G01N33/15,G01N33/50,G01N33/566, PC					
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RESULT 2  
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LOCUS Development of novel antibiotics based on bacteriophage genomics.  
DEFINITION BD245280  
ACCESSION BD245280.1 GI:33055050  
VERSION JP 2002531107-A/15.  
KEYWORDS  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 297)  
AUTHORS Pelletier,J., Gros,P. and Dubow,M.  
TITLE Development of novel antibiotics based on bacteriophage genomics  
JOURNAL Patent: JP 2002531107-A 15 24-SEP-2002;  
PHARTECH INC  
OS Staphylococcus aureus bacteriophage 77  
PN JP 2002531107-A/15  
PD 24-SEP-2002  
PF 03-DEC-1999 JP 2000585456  
PR 03-DEC-1998 US 60/110992,03-JUN-1999 US 09/326144 PR  
28-SEP-1999 US 09/407804,30-SEP-1999 US 60/157218 PR  
01-DEC-1999 US 60/168777,02-DEC-1999 US 09/454252 PT JERRY  
PELLETIER,PHILIPPE GROS,MICHAEL DUBOW  
PC C12N15/09,A01N63/00,A61K38/00,A61K45/00,A61P31/04,C07K14/005,  
PC C12M1/00,  
PC C12N1/21,C12Q1/02,C12Q1/68,G01N33/15,G01N33/50,G01N33/566, PC  
C12N15/00,  
PC A61K37/02  
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FH Key Location/Qualifiers  
FT source 1..297  
FT aureus bacteriophage 77'.  
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Best Local Similarity 100.0%; Prod. No. 1,28-131;  
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 37 ATGTATACGAAATAGCGAAATCATACGAAATATTCATGTAAAGGATTCATTT 96  
QY 61 AACTATTCATTTTAAAGTCATATGGGCATATACATGTTAAAGATATGAAC 120  
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QY 121 GTACCAATTAAACATGCTATGCTAGATGAAAGTACTTATGATGCACTTA 180  
DB 157 GTACCAATTAAACATGCTATGCTAGATGAAAGTACTTATGATGCACTTA 216  
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DB 217 TTTAACCAAGCAATAGATGATGATGAAAGAACAGACGAAACAGACTAAT 276  
QY 241 AACTAGTCATGAAATGTTAG 261  
DB 277 AACTAGTCATGAAATGTTAG 297  
RESULT 3  
BD245281 41708 bp DNA linear PAT 17-JUL-2003  
LOCUS Development of novel antibiotics based on bacteriophage genomics.  
DEFINITION BD245281  
ACCESSION BD245281.1 GI:33055051  
VERSION JP 2002531107-A/16.  
KEYWORDS  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 41708)  
AUTHORS Pelletier,J., Gros,P. and Dubow,M.  
TITLE Development of novel antibiotics based on bacteriophage genomics  
JOURNAL Patent: JP 2002531107-A 16 24-SEP-2002;  
PHARTECH INC  
OS Staphylococcus aureus bacteriophage 77  
PN JP 2002531107-A/16  
PD 24-SEP-2002  
PF 03-DEC-1999 JP 2000585456  
PR 03-DEC-1998 US 60/110992,03-JUN-1999 US 09/326144 PR  
28-SEP-1999 US 09/407804,30-SEP-1999 US 60/157218 PR  
01-DEC-1999 US 60/168777,02-DEC-1999 US 09/454252 PT JERRY  
PELLETIER,PHILIPPE GROS,MICHAEL DUBOW  
PC C12N15/09,A01N63/00,A61K38/00,A61K45/00,A61P31/04,C07K14/005,  
PC C12M1/00,  
PC C12N1/21,C12Q1/02,C12Q1/68,G01N33/15,G01N33/50,G01N33/566, PC  
C12N15/00,  
PC A61K37/02  
CC Genome Sequence  
FH Key Location/Qualifiers  
FT source 1..41708  
FT aureus bacteriophage 77'.  
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Location/Qualifiers  
source 1..41708

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Query Match 100.0%; Score 261; DB 6; Length 41708;  
Best Local Similarity 100.0%; Pred. No. 1.1e-131;  
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGATATACGAATAGCGAAATCATACGAAAAATATTCATGTAAAGGATTCATTT 60  
DB 29304 ATGATATACGAATAGCGAAATCATACGAAAAATATTCATGTAAAGGATTCATTT 29363  
QY 61 AACGATATCATTTTAAAGGTCATATGGCATATCAATACAAATTTAAAGATGAAACAC 120  
DB 29364 AACGATATCATTTTAAAGGTCATATGGCATATCAATACAAATTTAAAGATGAAACAC 29423  
QY 121 GTACCAATTAAACATGCTTATGTGTAGATGAGATGACTTAAATGGCATCAACTTA 180  
DB 29424 GTACCAATTAAACATGCTTATGTGTAGATGAGATGACTTAAATGGCATCAACTTA 29483  
QY 181 TTAAACCAAGCATATGATGATGATTTGAAGAAACACAGACAGACAGACTTAAT 240  
DB 29484 TTAAACCAAGCATATGATGATGATTTGAAGAAACACAGACAGACAGACTTAAT 29543  
QY 241 AACTAGTCATGAATGGTAG 261  
DB 29544 AACTAGTCATGAATGGTAG 29564

RESULT 4  
AR368770  
LOCUS AR368770 41708 bp DNA linear PAT 12-SEP-2003  
DEFINITION Sequence 3 from patent US 637652.  
ACCESSION AR368770  
VERSION AR368770.1 GI:34603077  
KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 41708)  
AUTHORS Polletier,J., Gros,P. and Dubow,M.  
TITLE Compositions and methods involving an essential *Staphylococcus aureus* gene and its encoded protein  
JOURNAL Patent: US 637652-A 3 23-APR-2002;  
FEATURES  
source location/Qualifiers  
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ORIGIN

Query Match 100.0%; Score 261; DB 6; Length 41708;  
Best Local Similarity 100.0%; Pred. No. 1.1e-131;  
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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DB 29304 ATGATATACGAATAGCGAAATCATACGAAAAATATTCATGTAAAGGATTCATTT 29363  
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QY 121 GTACCAATTAAACATGCTTATGTGTAGATGAGATGACTTAAATGGCATCAACTTA 180  
DB 29424 GTACCAATTAAACATGCTTATGTGTAGATGAGATGACTTAAATGGCATCAACTTA 29483  
QY 181 TTAAACCAAGCATATGATGATGATTTGAAGAAACACAGACAGACAGACTTAAT 240  
DB 29484 TTAAACCAAGCATATGATGATGATTTGAAGAAACACAGACAGACAGACTTAAT 29543  
QY 241 AACTAGTCATGAATGGTAG 261  
DB 29544 AACTAGTCATGAATGGTAG 29564

RESULT 5  
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LOCUS AP003360 348527 bp DNA linear BCT 07-FEB-2002  
DEFINITION *Staphylococcus aureus* subsp. *aureus* Mu50 genomic DNA, complete sequence, section 3/9.  
ACCESSION AP003360 BA000017  
VERSION AP003360.2 GI:14246388  
KEYWORDS  
SOURCE *Staphylococcus aureus* subsp. *aureus* Mu50  
ORGANISM *Staphylococcus aureus* subsp. *aureus* Mu50  
REFERENCE 1  
AUTHORS Kuroda,M., Ohta,T., Uchiyama,I., Baba,T., Yuzawa,H., Kobayashi,I., Cui,L., Oguchi,A., Aoki,K., Nagai,Y., Lian,J., Ito,T., Kanamori,M., Matsumaru,H., Maruyama,A., Murekami,H., Hosoyama,A., Mizutani-Ui,Y., Takahashi,N.K., Sawano,T., Inoue,R., Kato,C., Sekizawa,K., Hirakawa,H., Kubara,S., Goto,S., Yabuzaki,J., Keneshima,M., Yamashita,A., Oshima,K., Furuya,K., Yoshino,C., Shiba,T., Hattori,M., Ogasawara,N., Hayashi,H. and Hiramoto,K.  
TITLE Whole genome sequencing of methicillin-resistant *Staphylococcus aureus*

JOURNAL Lancet 357 (9264), 1225-1240 (2001)  
MEDLINE 21311952  
PUBMED 11418146  
REFERENCE 2 (bases 1 to 348527)  
AUTHORS Ohta,T.  
TITLE Direct Submission  
JOURNAL Submitted (28-FEB-2001) Toshiko Ohta, University of Tsukuba College of Medical Technology and Nursing, Department of Medical Technology/ 1-1-1 Ten-nodai, Tsukuba, Ibaraki 305-8577, Japan (E-mail:tohta@sekura.cc.tsukuba.ac.jp, Tel:81-298-53-3454, Fax:81-298-53-3454)  
COMMENT On May 29, 2001 this sequence version replaced gi:13874937.  
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737. .2761  
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Matches 231; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Db 230755 CATATGGCATATCATATACAGTTAAAGATGAACAGACATTAATACATGCTAT  
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Db 230815 GTCATGATGAGATGACTATGATATGCGATCACTATTTAACCAAGCATATGAA  
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Db 230875 TGCATTTGAAGAGACAGACAGACAGACAGACTATTAATTAATGATGATGA 230926  
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RESULT 6  
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LOCUS  
DEFINITION  
Staphylococcus aureus prophage phiPV83 proviral DNA, complete  
sequence.  
AB044534  
VERSION  
AB044534.1 GI:8918747  
KEYWORDS  
SOURCE  
Staphylococcus aureus prophage phiPV83  
ORGANISM  
Staphylococcus aureus prophage phiPV83  
Viruses; dsDNA viruses, no RNA stage; Caudovirales; Siphoviridae.  
1 (sites)  
REFERENCE  
AUTHORS  
TITLE  
Kaneko, J., Kimura, T., Kawakami, Y., Tomita, T. and Kamio, Y.  
Panton-valentine leukocidin genes in a phage-like particle isolated  
from mitomycin C-treated Staphylococcus aureus V8 (ATCC 49775)  
JOURNAL  
Biosci. Biotechnol. Biochem. 61 (11), 1960-1962 (1997)  
MEDLINE  
98067870  
PUBMED  
9404084  
REFERENCE  
AUTHORS  
TITLE  
Zou, D., Kaneko, J., Narita, S. and Kamio, Y.  
Complete nucleotide sequence and molecular characterization of  
prophage PV83pro carrying lukM-lukF-PV(p83) gene cluster in  
Staphylococcus aureus strain P83  
JOURNAL  
Unpublished  
REFERENCE  
AUTHORS  
TITLE  
3 (bases 1 to 45636)  
Kaneko, J., Zou, D. and Kamio, Y.  
Direct Submission  
Submitted (09-JUN-2000) Jun Kaneko, Tohoku University, Graduate  
school of Agricultural Science; 1-1 Tsutsumi-dori Aamimiyamechi,  
Aoba-ku, Sendai, Miyagi 981-8555, Japan  
(E-mail: jkaneko@biochem.tohoku.ac.jp, Tel: 81-22-717-8781,  
Fax: 81-22-717-8780)  
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Query Match 67.4%; Score 176; DB 7; Length 45636;  
Best Local Similarity 100.0%; Pred. No. 3,76-85;  
Matches 176; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 7  
AB045978 42942 bp DNA linear PHG 26-MAY-2001  
LOCUS Staphylococcus aureus temperate phage phiSLT genomic DNA, complete  
DEFINITION sequence.  
ACCESSION AB045978  
VERSION AB045978.1 GI:12697822  
KEYWORDS  
SOURCE Staphylococcus aureus temperate phage phiSLT  
ORGANISM Staphylococcus aureus temperate phage phiSLT  
REFERENCE Viruses; dsDNA viruses, no RNA stage; Caudovirales; Siphoviridae.  
1 (sites)  
Narita,S., Kaneko,J., Chiba,J., Piemont,Y., Jarraud,S., Etienne,J.  
and Kamio,Y.  
Phage conversion of Panton-Valentine leukocidin in Staphylococcus  
aureus: molecular analysis of a PVL-converting phage, phiSLT.  
Gene 260 (1-2), 195-206 (2001)  
MEDLINE 21261956  
PUBMED 11368915  
REFERENCE 2 (bases 1 to 42942)  
AUTHORS Kaneko,J., Narita,S. and Kamio,Y.  
TITLE Direct Submission  
JOURNAL Submitted (12-JUL-2000) Jun Kaneko, Tohoku University, Graduate  
school of Agricultural Science; 1-1 Tsurumidori Amamiyamachi,  
Sendai, Miyagi 981-8555, Japan  
(E-mail:jkaneko@biochem.tohoku.ac.jp, Tel:81-22-717-8781,  
Fax:81-22-747-8780)

FEATURES  
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Best Local Similarity 100.0%; Pred. No. 6,2e-77;  
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DB 7414 GTCGTAGATGAGATGACTTATAGATATGGCATCGACTTAT 7454

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AB009866 41401 bp DNA linear PHG 23-MAY-2000  
Bacteriophage phl PVL proviral DNA, complete sequence.  
AB009866  
AB009866.2 GI:8051688  
dUpasee; sDNA binding protein; anti repressor; repressor;  
integrase; LukE-PV; LukS-PV; holin; amidase (peptidoglycan  
hydrolase); capsid protein; portal protein.  
Staphylococcus aureus bacteriophage PVL  
Staphylococcus aureus bacteriophage PVL  
Viruses; dsDNA viruses, no RNA stage; Caudovirales; Siphoviridae.  
1 (sites)  
2 (sites)  
3 (bases 1 to 41401)  
Kaneko, J., Kimura, T., Naito, S., Tomita, T. and Kamio, Y.  
Complete nucleotide sequence and molecular characterization of the  
temperate staphylococcal bacteriophage phlPVL carrying  
Panton-Valentine leukocidin genes  
Gene 215 (1), 57-67 (1998)  
98332719  
9666077  
3 (bases 1 to 41401)  
Kaneko, J., Kimura, T., Naito, S., Tomita, T. and Kamio, Y.  
Submitted (17-DEC-1997) Jun Kaneko, Tohoku University, Dept. Appl.  
Biol. Chem., Faculty of Agriculture; 1-1 Tsurumi-dori  
Aramiyamachi, Aoba-ku, Sendai, Miyagi 981, Japan  
(E-mail: jkaneko@biochem.tohoku.ac.jp, Tel: 81-22-717-8781,  
Fax: 81-22-717-8780)  
On May 24, 2000 this sequence version replaced gi:3341907.  
Sequence updated (06-Feb-1998)  
Sequence updated (22-May-2000).  
Location/Qualifiers  
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CDS

Query Match 60.9%; Score 159; DB ?; Length 41401;  
Best Local Similarity 99.2%; Pred. No. 7.7e-76;  
Matches 259; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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DB 30793 AACTAGTCATGAATGTTGTT 30813

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AP001553 43081 bp DNA circular PHG 14-MAR-2001  
Bacteriophage phi ETA DNA, complete genome.  
AP001553  
AP001553.1 GI:8918415  
Bacteriophage phi ETA  
Bacteriophage phi ETA  
Viruses; dsDNA viruses, no RNA stage; Caudovirales; Siphoviridae.  
1 (sites)  
Yamaguchi, T., Hayashi, T., Takami, H., Nakasone, K., Onishi, M.,  
Nakayama, K., Yamada, S., Komatsu, H. and Sugai, M.  
Phage conversion of exfoliative toxin A production in  
Staphylococcus aureus  
Mol. Microbiol. 38 (4), 694-705 (2000)  
20566787  
1115106  
2 (bases 1 to 43081)  
Sugai, M., Yamaguchi, T., Hayashi, T., Nakasone, K. and Takami, H.  
Direct Submision  
Submitted (28-MAR-2000) Motomuki Sugai, Hiroshima University  
Faculty of Dentistry, Microbiology; Kasumi 1-2-3, Hiroshima,  
Hiroshima 734-8553, Japan (E-mail: sugai@hiroshima-u.ac.jp,  
Tel:81-82-257-5637, Fax:81-82-257-5639)  
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DEFINITION Staphylococcus aureus subsp. aureus N315 genomic DNA, complete  
ACCESSION AP003135 BA000018  
VERSION 1  
KEYWORDS AP003135.2 GI:14349227  
SOURCE Staphylococcus aureus subsp. aureus N315  
ORGANISM Staphylococcus aureus subsp. aureus N315  
REFERENCE 1  
AUTHORS Kuroda,M., Ohta,T., Uchiyama,I., Baba,T., Yuzawa,H., Kobayashi,I.,  
Cui,L., Oguchi,A., Aoki,K., Nagai,Y., Llan,O., Ito,T., Kanamori,M.,  
Matsumaru,H., Maruyama,A., Murakami,H., Hosoyama,A.,  
Mizutani-Ui,Y., Takahashi,N.K., Sawano,T., Inoue,R., Kato,C.,  
Sekimizu,K., Hirakawa,H., Kubara,S., Goto,S., Yabuzaki,J.,  
Kanehisa,M., Yamashita,A., Oshima,K., Furuya,K., Yoshino,C.,  
Shiba,T., Hatori,M., Ogasawara,N., Hayashi,H. and Hiramatsu,K.  
Whole genome sequencing of methicillin-resistant Staphylococcus  
aureus  
JOURNAL Lancet 357 (9264), 1225-1240 (2001)  
MEDLINE 21311952  
PUBMED 11418146  
REFERENCE 2 (bases 1 to 291150)  
AUTHORS Director-General, Biotechnology Center, Aoki,K., Oguchi,A.,  
Hosoyama,A., Nagai,Y., Kuroda,M., Hiramatsu,K. and Kikuchi,H.  
TITLE Direct Submission  
JOURNAL Submitted (30-JAN-2001) Director-General, Biotechnology Center,  
National Institute of Technology and Evaluation, Biotechnology  
Center; 2Chome 49-10 Nishihara, Shibuya-Ku, Tokyo 151-0066, Japan  
COMMENT (E-mail:bio@nite.go.jp, URL:htp://www.bio.nite.go.jp/,  
Tel:81-3-3481-1933, Fax:81-3-3481-8424)  
On Jun 12, 2001 this sequence version replaced gi:13701545.  
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DB 24001 GACAGGACGACGACTAATTAGTCATGAATGGTAG 23963  
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AX618246 267 bp DNA linear PAT 20-FEB-2003  
LOCUS Sequence 1209 from Patent WO02094868.  
ACCESSION AX618246  
VERSION AX618246.1 GI:28448442  
KEYWORDS  
SOURCE Staphylococcus aureus  
Staphylococcus aureus  
ORGANISM Bacteria; Firmicutes; Bacillales; Staphylococcus.  
REFERENCE  
1 Maignant,V.C., Mora,M.C. and Saezrelli,M.C.  
AUTHORS Staphylococcus aureus proteins and nucleic acids  
TITLE Patent: WO 02094868-A 1209 28-NOV-2002;  
JOURNAL Chiron Spa (IT)  
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DB 206 ATGATGGATTGAAGGACACAGACGAA 234  
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LOCUS Staphylococcus aureus phage phi 13, complete genome.  
ACCESSION AF424783  
VERSION AF424783.1 GI:18920591  
KEYWORDS  
SOURCE Staphylococcus aureus phage phi 13  
ORGANISM Staphylococcus aureus phage phi 13  
REFERENCE  
1 Virtuesi, deDNA viruses, no RNA stage; Caudovirales; Siphoviridae.  
1 (bases 1 to 42722)  
AUTHORS Iandolo,J., Worrell,V., Grolicher,K.H., Qian,Y., Tian,R.,  
Kenton,S., Dorman,A., Ji,H., Lin,S., Loh,P., Qi,S., Zhu,H. and  
Roe,B.A.  
TITLE Comparative analysis of the genomes of the temperate bacteriophages  
JOURNAL phi11, phi12 and phi13 of Staphylococcus aureus 8325  
MEDLINE 22032962  
PUBMED 12036589  
REFERENCE  
2 (bases 1 to 42722)  
AUTHORS Iandolo,J., Worrell,V., Roe,B., Qian,Y., Dorman,A., Tian,R.,  
Lin,S. and Jia,H.  
TITLE Direct Submission  
JOURNAL Submitted (26-SEP-2001) Microbiology and Immunology, Univ. of  
Oklahoma Health Sciences Center, 940 S.L. Young Bvd, Oklahoma City,  
OK 73190, USA  
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RESULT 13  
AP004828/c

LOCUS	AP004828	272850 bp	DNA	linear	BCT 20-DEC-2002			
DEFINITION	Staphylococcus aureus subsp. aureus MW2 DNA, complete genome, strain: MW2, section 7/10.							
ACCESSION	AP004828	BA000033						
VERSION	AP004828.1	GI:21204850						
KEYWORDS								
SOURCE	Staphylococcus aureus subsp. aureus MW2							
ORGANISM	Staphylococcus aureus subsp. aureus MW2							
REFERENCE	Bacteria; Firmicutes; Bacillales; Staphylococcus.							
AUTHORS	1 Baba, T., Takeuchi, F., Kuroda, M., Yuzawa, H., Aoki, K., Oguchi, A., Nagai, Y., Iwama, N., Asano, K., Naimi, T., Kuroda, H., Ohi, L., Yamamoto, K. and Hiratazu, K.							
TITLE	Genome and virulence determinants of high virulence community-acquired MRSA							
JOURNAL	Lancet	359 (9320),	1819-1827	(2002)				
MEDLINE	22040717							
PUBMED	12044378							
REFERENCE	2 (bases 1 to 272850)							
AUTHORS	Director-General, Biotechnology Center, Aoki, K., Oguchi, A., Nagai, Y., Asano, K., Iwama, N., Baba, T., Kuroda, M., Hiratazu, K. and Kikuchi, H.							
TITLE	Direct Submission							
JOURNAL	Submitted (06-MAR-2002) Director-General, Biotechnology Center, National Institute of Technology and Evaluation, Biotechnology Center, 2Chome 49-10 Nishihara, Shibuya-Ku, Tokyo 151-0066, Japan (E-mail: biogen@nig.ac.jp, URL: http://www.bio.nige.ac.jp/, tel:81-3-3481-1933, fax:81-3-3481-8424)							
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ACCESSION AR35085  
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KEYWORDS  
SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 580)  
AUTHORS Kunach,C.A., Choi,G.H., Barash,S., Dillon,P.J., Fannon,M.R. and  
TITLE Staphylococcus aureus polynucleotides and sequences  
JOURNAL Patent: US 6593114-A 1203 15-JUL-2003;  
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LOCUS BD245634  
DEFINITION Development of novel antibiotics based on bacteriophage genomics.  
ACCESSION BD245634  
VERSION BD245634.1 GI:33055404  
KEYWORDS JP 2002531107-A/369.  
SOURCE unidentified  
ORGANISM unidentified.  
REFERENCE 1 (bases 1 to 43594)  
AUTHORS Pelletier,J., Gros,P. and Dubow,M.  
TITLE Development of novel antibiotics based on bacteriophage genomics  
JOURNAL Patent: JP 2002531107-A 369 24-SEP-2002;  
COMMENT PHAGETECH INC  
OS Staphylococcus aureus bacteriophage 96  
PN JP 2002531107-A/369  
PD 24-SEP-2002  
PF 03-DEC-1999 JP 2000585456  
PR 03-DEC-1998 US 60/110992,03-JUN-1999 US 09/326144 PR  
28-SEP-1999 US 09/407804,30-SEP-1999 US 60/157218 PR  
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GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

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Minimum DB seq length: 0  
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Post-processing: listing first 1000 summaries

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#### SUMMARIES

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6	28	10.7	580	2	AAV75314 Staphyloc
7	28	10.7	43576	3	AAA68609 Bacterioph

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c 124	16	6.1	962	4	AA133210	AA133210 Probe #18	c 181	16	6.1	4226	5	AA213324
c 125	16	6.1	962	4	ABA43165	ABA43165 Human bre	c 182	16	6.1	4507	4	AA103732
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c 137	16	6.1	1260	2	AA172049	AA172049 Sequence	c 194	16	6.1	6426	5	ABA20567
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c 175	16	6.1	3637	9	AAK035236	AAK035236 Human pro	c 232	16	6.1	96389	8	ADK02675
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c 238	16	6.1	110000	6	ABA9287_0	ABA9287 Buchnera	c 295	15	5.7	268	6	ABK38292	ABK38292 cDNA erco
c 239	16	6.1	110000	6	ABT01503.11	Continuation (12 o	c 296	15	5.7	268	7	ACQ10621	ACQ10621 Human lun
c 240	16	6.1	110000	6	ABA03041.08	Continuation (9 of	c 297	15	5.7	268	7	ACQ10621	ABK95572 Lung cano
c 241	16	6.1	110000	7	ABS56454.06	Continuation (14 o	c 298	15	5.7	268	10	ADK72355	ADK72355 Human lun
c 242	16	6.1	110000	7	ABS56454_13	Continuation (17 o	c 299	15	5.7	286	4	AAK47601	AAK47601 Enterococ
c 243	16	6.1	110000	7	ABS56454_16	Continuation (21 o	c 300	15	5.7	287	7	ABK7507	ABK7507 Corn ear-
c 244	16	6.1	110000	8	ABK03408_20	ABK03408 Genomic D	c 301	15	5.7	294	5	ABK58694	ABK58694 Human pro
c 245	16	6.1	111282	6	AA144261	AA144261 Human pho	c 302	15	5.7	297	6	ABS17999	ABS17999 Human gen
c 246	16	6.1	111282	6	ABS55190	ABS55190 Genomic D	c 303	15	5.7	324	6	ABK68225	ABK68225 Listeria
c 247	16	6.1	139032	6	ABK79105	ABK79105 Human for	c 304	15	5.7	325	6	AAK38836	AAK38836 Novel hum
c 248	16	6.1	139032	6	ABK83562	ABK83562 Human cDN	c 305	15	5.7	332	6	ABK18909	ABK18909 Human ORF
c 249	16	6.1	139040	6	AAH41227	AAH41227 Pyrococcu	c 306	15	5.7	334	6	AAK47653	AAK47653 Enterococ
c 250	16	6.1	139904	6	ABK41227	ABK41227 Pyrococcu	c 307	15	5.7	334	7	ACQ12352	ACQ12352 Prokaryot
c 251	16	6.1	349901	9	ADC86940	ADC86940 Human GPC	c 308	15	5.7	337	4	AA188498	AA188498 Human pol
c 252	16	6.1	349901	9	ADC86940	ADC86940 Human GPC	c 309	15	5.7	339	6	ABK78592	ABK78592 Bacillus
c 253	16	6.1	349938	9	ADC87621	ADC87621 Human GPC	c 310	15	5.7	339	6	ABK78592	ABK78592 Aspergill
c 254	15	5.7	25	7	ACF03399	ACF03399 M. gallis	c 311	15	5.7	350	7	ABK5662	ABK5662 Human bra
c 255	15	5.7	33	2	AAK12528	AAK12528 PCR prime	c 312	15	5.7	351	2	AAQ60794	AAQ60794 Human bra
c 256	15	5.7	47	3	AAK67197	AAK67197 Human map	c 313	15	5.7	353	2	AAQ59515	AAQ59515 Human sec
c 257	15	5.7	56	2	AAV76389	AAV76389 Staphyloc	c 314	15	5.7	357	3	AAK28211	AAK28211 Human bra
c 258	15	5.7	91	4	AAK47846	AAK47846 Enterococ	c 315	15	5.7	370	7	ABK45244	ABK45244 Bovine ES
c 259	15	5.7	91	7	ACQ12573	ACQ12573 Prokaryot	c 316	15	5.7	384	4	AAK13791	AAK13791 Human bra
c 260	15	5.7	150	2	AAH86832	AAH86832 Human sin	c 317	15	5.7	384	4	ABK35501	ABK35501 Human bra
c 261	15	5.7	152	3	AAK22270	AAK22270 Human sec	c 318	15	5.7	384	4	AAK135151	AAK135151 Human bra
c 262	15	5.7	165	4	ABK47657	ABK47657 Human foe	c 319	15	5.7	384	4	ABK45029	ABK45029 Human bra
c 263	15	5.7	165	4	AA155150	AA155150 Probe #23	c 320	15	5.7	384	4	AAK25217	AAK25217 Probe #36
c 264	15	5.7	165	4	AAK49303	AAK49303 Human bon	c 321	15	5.7	384	4	AAK25219	AAK25219 Human bon
c 265	15	5.7	165	4	AAK23130	AAK23130 Human bra	c 322	15	5.7	384	4	AAK03735	AAK03735 Human bra
c 266	15	5.7	165	4	ABK48942	ABK48942 Human liv	c 323	15	5.7	384	4	ABK28816	ABK28816 Human liv
c 267	15	5.7	165	6	ABS22824	ABS22824 Human gen	c 324	15	5.7	384	5	AA103667	AA103667 Probe #36
c 268	15	5.7	167	6	ABK78996	ABK78996 Human ova	c 325	15	5.7	384	6	ABS03751	ABS03751 Human gen
c 269	15	5.7	176	4	AAK47723	AAK47723 Enterococ	c 326	15	5.7	386	2	AAV15598	AAV15598 Papilloma
c 270	15	5.7	176	6	ACQ12419	ACQ12419 Prokaryot	c 327	15	5.7	386	2	AAV15598	AAV15598 Papilloma
c 271	15	5.7	178	6	ABK08290	ABK08290 Human leu	c 328	15	5.7	398	4	AA192814	AA192814 Human pol
c 272	15	5.7	191	4	AAK47538	AAK47538 Enterococ	c 329	15	5.7	403	2	AAQ62791	AAQ62791 Human pol
c 273	15	5.7	191	4	AAK47582	AAK47582 Enterococ	c 330	15	5.7	407	7	ABK36649	ABK36649 Bovine ES
c 274	15	5.7	191	4	AAK47542	AAK47542 Enterococ	c 331	15	5.7	407	7	ABK62547	ABK62547 Acrelidos
c 275	15	5.7	191	4	AAK47557	AAK47557 Enterococ	c 332	15	5.7	414	8	ADK31018	ADK31018 DNA enco
c 276	15	5.7	191	7	ACQ12277	ACQ12277 Prokaryot	c 333	15	5.7	423	6	ABK19543	ABK19543 Human ORF
c 277	15	5.7	191	7	ACQ12236	ACQ12236 Prokaryot	c 334	15	5.7	426	7	AAK44832	AAK44832 Bovine ES
c 278	15	5.7	191	7	ACQ12237	ACQ12237 Prokaryot	c 335	15	5.7	428	3	AAK57698	AAK57698 Acrelidos
c 279	15	5.7	191	7	ACQ12249	ACQ12249 Prokaryot	c 336	15	5.7	430	5	ABK00400	ABK00400 Human pro
c 280	15	5.7	195	3	AAK14255	AAK14255 Human ova	c 337	15	5.7	432	6	ABK76313	ABK76313 Bacillus
c 281	15	5.7	198	6	ABK484328	ABK484328 Human ova	c 338	15	5.7	433	5	ABK48231	ABK48231 Human pro
c 282	15	5.7	234	4	AAK02084	AAK02084 Human sec	c 339	15	5.7	437	5	ABK16674	ABK16674 Human ner
c 283	15	5.7	235	4	AAK77774	AAK77774 Human lmm	c 340	15	5.7	438	4	AAK49430	AAK49430 Staphyloc
c 284	15	5.7	235	4	AAK77773	AAK77773 Human lmm	c 341	15	5.7	438	7	AAK16657	AAK16657 Prokaryot
c 285	15	5.7	242	6	ABK63616	ABK63616 Breast ca	c 342	15	5.7	447	8	ABK48769	ABK48769 Banana ge
c 286	15	5.7	244	3	AAK10119	AAK10119 Rat liver	c 343	15	5.7	456	6	ABK95163	ABK95163 Human pan
c 287	15	5.7	244	4	ABK42143	ABK42143 Rat target	c 344	15	5.7	457	8	ACQ26876	ACQ26876 Human edu
c 288	15	5.7	247	4	ABK71289	ABK71289 Human foe	c 345	15	5.7	458	5	ABK09569	ABK09566 Human pro
c 289	15	5.7	247	4	AA151531	AA151531 Probe #20	c 346	15	5.7	459	5	ABK39713	ABK39713 Human pro
c 290	15	5.7	247	4	AAK45594	AAK45594 Human bon	c 347	15	5.7	460	5	ABK39745	ABK39745 Human pro
c 291	15	5.7	247	4	AAK19591	AAK19591 Human bra	c 348	15	5.7	460	8	ACQ25839	ACQ25839 Human edu

c 349	15	5.7	468	ABA5855	Abz5855 Human fce	406	15	5.7	621	7	ABZ42092	Abz42092 Arabidops
c 350	15	5.7	468	AA138216	AA138216 Probe #69	407	15	5.7	624	6	ABK7940	ABK7940 Bacillus
c 351	15	5.7	468	AAK32370	AAK32370 Human bron	c 408	15	5.7	637	7	ABX12499	ABX12499 cDNA enco
c 352	15	5.7	468	AAK06674	AAK06674 Human bra	409	15	5.7	642	6	ABK7941	ABK7941 Bacillus
c 353	15	5.7	468	ABS32078	ABS32078 Human liv	410	15	5.7	649	4	AA184272	AA184272 Human pol
c 354	15	5.7	468	ABS07153	ABS07153 Human gen	411	15	5.7	658	4	AAE22946	AAE22946 Human pro
c 355	15	5.7	478	ABS05296	ABS05296 Human gen	412	15	5.7	674	3	AAE35543	AAE35543 Human sec
c 356	15	5.7	480	AAK79690	AAK79690 Human imm	c 413	15	5.7	682	6	ABK65486	ABK65486 Human can
c 357	15	5.7	483	AAK78335	AAK78335 DNA encod	c 414	15	5.7	683	3	AAE11854	AAE11854 Aspergill
c 358	15	5.7	485	ACM14945	ACM14945 Human adu	c 415	15	5.7	687	7	ACF73989	ACF73989 Staphyloc
c 359	15	5.7	488	5	ABAI6716 Human ner	c 416	15	5.7	690	7	ACA20358	ACA20358 Prokaryot
c 360	15	5.7	488	5	ABAI6713 Human ner	417	15	5.7	693	4	AAE65577	AAE65577 Human imm
c 361	15	5.7	488	5	ABAI6713 Human ner	418	15	5.7	699	7	ACA33230	ACA33230 Prokaryot
c 362	15	5.7	491	6	ABV99050 Human pan	419	15	5.7	702	4	AAE52908	AAE52908 Enterococ
c 363	15	5.7	492	6	ABJ36418 Human col	c 420	15	5.7	707	6	ABQ46894	ABQ46894 Oligonuc
c 364	15	5.7	493	7	ACC60444 Rice leaf	421	15	5.7	707	6	ABQ46895	ABQ46895 Oligonuc
c 365	15	5.7	498	3	AAK94504 Cat flea	422	15	5.7	708	6	ABN91859	ABN91859 Staphyloc
c 366	15	5.7	498	4	AAK7857 Human imm	423	15	5.7	714	4	AAE22944	AAE22944 Human pro
c 367	15	5.7	499	6	ABK57276 Human col	424	15	5.7	717	4	AAI95196	AAI95196 Human neu
c 368	15	5.7	500	6	ABK53395 Human eos	c 425	15	5.7	754	4	AAK51627	AAK51627 Human neu
c 369	15	5.7	506	6	ABN9905 Target ca	426	15	5.7	755	3	AAK42653	AAK42653 Arabidops
c 370	15	5.7	511	4	AAI92763 Human pol	c 427	15	5.7	756	2	AAQ43704	AAQ43704 Sequence
c 371	15	5.7	514	9	ADD17902 DNA (Seq)	c 428	15	5.7	756	6	ABR84157	ABR84157 Human cDN
c 372	15	5.7	520	3	AAK39612 Arabidops	c 429	15	5.7	772	3	AAZ97291	AAZ97291 Human pro
c 373	15	5.7	522	4	AAK62528 Prokaryot	c 430	15	5.7	775	4	AAI23383	AAI23383 Human bre
c 374	15	5.7	525	7	ACA35322 Enterococ	c 431	15	5.7	786	6	ABK69343	ABK69343 Streptococ
c 375	15	5.7	529	4	AAK47497 Human pro	432	15	5.7	813	4	AAI94687	AAI94687 Human neu
c 376	15	5.7	529	4	AAK47502 Human pro	433	15	5.7	828	2	AAI67865	AAI67865 H. pylori
c 377	15	5.7	529	5	ABV47427 Human pro	c 434	15	5.7	835	4	AAI94407	AAI94407 Human neu
c 378	15	5.7	529	7	ACA12204 Prokaryot	c 435	15	5.7	837	2	AAI67694	AAI67694 Human neu
c 379	15	5.7	532	7	ACA12192 Prokaryot	c 436	15	5.7	876	7	ACA30332	ACA30332 Prokaryot
c 380	15	5.7	541	6	ABQ39476 Oligonuc	c 437	15	5.7	879	4	AAE56047	AAE56047 Human neu
c 381	15	5.7	541	6	ABQ39477 Human mlt	c 438	15	5.7	879	4	AAE56047	AAE56047 Human neu
c 382	15	5.7	551	7	ABK53178 Human mlt	c 439	15	5.7	879	4	AAE56047	AAE56047 Human neu
c 383	15	5.7	551	7	ABK53178 Human mlt	c 440	15	5.7	879	4	AAE56047	AAE56047 Human neu
c 384	15	5.7	567	2	AAK27703 Arabidops	c 441	15	5.7	945	7	AAH32127	AAH32127 Human Olf
c 385	15	5.7	567	8	ADA31675 DNA encod	c 442	15	5.7	945	7	AAH32127	AAH32127 Human Olf
c 386	15	5.7	569	2	AAK27765 Sequence	c 443	15	5.7	947	8	AAI61111	AAI61111 Human T81
c 387	15	5.7	570	4	ABH13333 Drosophill	c 444	15	5.7	949	4	AAH32324	AAH32324 Human olf
c 388	15	5.7	570	4	ABH13333 Drosophill	c 445	15	5.7	954	7	ACF73679	ACF73679 Staphyloc
c 389	15	5.7	570	4	AAI39572 Probe #82	446	15	5.7	956	9	AAE53698	AAE53698 Human pro
c 390	15	5.7	570	4	ABH33655 Human liv	c 447	15	5.7	985	4	AAI97659	AAI97659 Human neu
c 391	15	5.7	572	2	AAQ44852 Bacillus	448	15	5.7	995	3	AAZ45340	AAZ45340 DNA encod
c 392	15	5.7	581	7	ACA10275 Rice leaf	c 449	15	5.7	996	4	AAI212949	AAI212949 Human G-P
c 393	15	5.7	582	7	ACF73303 Stephyloc	c 450	15	5.7	996	5	AAE42281	AAE42281 Human cDN
c 394	15	5.7	592	4	ABA62163 Human fce	451	15	5.7	996	6	ABQ41998	ABQ41998 Oligonuc
c 395	15	5.7	592	4	AAI42117 Probe #10	c 452	15	5.7	996	6	ABQ41999	ABQ41999 Oligonuc
c 396	15	5.7	592	4	AAK36383 Human bon	c 453	15	5.7	996	6	ABZ42987	ABZ42987 Human GPC
c 397	15	5.7	592	4	AAK10484 Human bra	c 454	15	5.7	996	6	ABK68496	ABK68496 Human DNA
c 398	15	5.7	592	4	ABH36058 Human liv	c 455	15	5.7	996	6	ABK68496	ABK68496 Human DNA
c 399	15	5.7	613	6	ABQ6674 Arabidops	c 456	15	5.7	996	6	ABK68496	ABK68496 Human DNA
c 400	15	5.7	613	6	ABQ6674 Arabidops	c 457	15	5.7	999	9	ACA21167	ACA21167 Prokaryot
c 401	15	5.7	616	5	AAZ9182 S. pneumo	c 458	15	5.7	1000	8	AAE23173	AAE23173 Envelope
c 402	15	5.7	616	5	ABV51537 Human pro	c 459	15	5.7	1003	4	AAI217913	AAI217913 G-protein
c 403	15	5.7	620	2	AAE98607 DNA encod	c 460	15	5.7	1004	4	AAI217914	AAI217914 G-protein
c 404	15	5.7	620	7	ADA68382 Arabidops	c 461	15	5.7	1005	4	AAI217915	AAI217915 G-protein
c 405	15	5.7	621	6	ABZ14361 Arabidops	c 462	15	5.7	1008	3	AAE81727	AAE81727 Human sec

c 463	15	5.7	1008	7	AB267246	Abz67246 Human sec	c 520	15	5.7	1560	6	AB214446	Abz14446 Arabidops
c 464	15	5.7	1008	7	AB273552	Abz73552 Secreted	c 521	15	5.7	1571	9	ADC85922	Adc85922 Human GPC
c 465	15	5.7	1008	7	ADC20294	Adc20294 Human sec	c 522	15	5.7	1573	3	AA67654	AA67654 Human sec
c 466	15	5.7	1019	4	AA559766	AA559766 Propionib	c 523	15	5.7	1581	5	AA73187	AA73187 Human sec
c 467	15	5.7	1019	7	ACF64695	ACF64695 Propionib	c 524	15	5.7	1590	6	ABA96173	ABA96173 Human imm
c 468	15	5.7	1034	2	AA727285	AA727285 Metastasi	c 525	15	5.7	1671	3	AA646002	AA646002 Arabidops
c 469	15	5.7	1047	6	AA562681	AA562681 cDNA sequ	c 526	15	5.7	1674	6	ABR83552	ABR83552 Human cDN
c 470	15	5.7	1047	8	AD292215	AD292215 DNA encod	c 527	15	5.7	1674	7	AB271997	AB271997 Human cDN
c 471	15	5.7	1074	7	ACA47371	ACA47371 Prokaryot	c 528	15	5.7	1695	4	AA530182	AA530182 Human cDN
c 472	15	5.7	1081	7	ABX95119	ABX95119 DNA sequ	c 529	15	5.7	1695	7	ACD01622	ACD01622 Human nov
c 473	15	5.7	1082	7	ABQ79296	ABQ79296 Rat blliv	c 530	15	5.7	1695	9	AA62066	AA62066 Human sec
c 474	15	5.7	1082	7	ADBS3527	ADBS3527 Primary r	c 531	15	5.7	1695	9	AA62066	AA62066 Human sec
c 475	15	5.7	1088	6	ABO69005	ABO69005 listeria	c 532	15	5.7	1716	5	AAH52133	AAH52133 Human AFP
c 476	15	5.7	1096	2	AA30757	AA30757 streptoco	c 533	15	5.7	1729	4	AB112281	AB112281 Drosophil
c 477	15	5.7	1107	7	ACF70527	ACF70527 Photornab	c 534	15	5.7	1809	7	ADA52570	ADA52570 Human cod
c 478	15	5.7	1152	6	ABQ67997	ABQ67997 listeria	c 535	15	5.7	1845	7	AB236297	AB236297 Human sec
c 479	15	5.7	1152	6	ABQ69985	ABQ69985 listeria	c 536	15	5.7	1864	3	AACT6482	AACT6482 Human ORF
c 480	15	5.7	1188	5	AA587496	AA587496 DNA encod	c 537	15	5.7	1890	4	AAE22942	AAE22942 Human pro
c 481	15	5.7	1188	5	AB212826	AB212826 Arabidops	c 538	15	5.7	1910	4	AA164471	AA164471 Human car
c 482	15	5.7	1200	7	ACA29400	ACA29400 Prokaryot	c 539	15	5.7	1936	6	AB165828	AB165828 Lung canc
c 483	15	5.7	1232	4	AB121161	AB121161 Drosophil	c 540	15	5.7	1946	2	AA206796	AA206796 Cartilage
c 484	15	5.7	1245	9	ADC91220	ADC91220 E. faecili	c 541	15	5.7	1948	6	ABQ69181	ABQ69181 listeria
c 485	15	5.7	1282	2	AA783774	AA783774 DNA encod	c 542	15	5.7	1968	5	AA566042	AA566042 C glutami
c 486	15	5.7	1289	4	AAU08693	AAU08693 Rat P2-pu	c 543	15	5.7	1974	5	AA587504	AA587504 DNA encod
c 487	15	5.7	1332	6	AAU40802	AAU40802 Nucleic a	c 544	15	5.7	2000	6	AB21290	AB21290 Arabidops
c 488	15	5.7	1332	6	AAU31014	AAU31014 Yeast mev	c 545	15	5.7	2000	6	AB21290	AB21290 Arabidops
c 489	15	5.7	1332	6	ABX96800	ABX96800 S. cerevis	c 546	15	5.7	2000	6	AB215450	AB215450 Arabidops
c 490	15	5.7	1345	7	ADA71970	ADA71970 Rice gene	c 547	15	5.7	2000	6	AB217249	AB217249 Arabidops
c 491	15	5.7	1366	8	AAU61112	AAU61112 Human T81	c 548	15	5.7	2000	6	AB215172	AB215172 Arabidops
c 492	15	5.7	1367	3	AA698043	AA698043 Human col	c 549	15	5.7	2000	7	ADA72698	ADA72698 Rice gene
c 493	15	5.7	1369	7	ABX12505	ABX12505 cDNA encod	c 550	15	5.7	2000	7	ACC61839	ACC61839 Gene sequ
c 494	15	5.7	1373	3	AA642135	AA642135 Arabidops	c 551	15	5.7	2000	7	ADA72965	ADA72965 Rice gene
c 495	15	5.7	1374	7	ACA22021	ACA22021 Prokaryot	c 552	15	5.7	2000	7	ADA69209	ADA69209 Arabidops
c 496	15	5.7	1379	3	AA633152	AA633152 Arabidops	c 553	15	5.7	2000	7	ADA72698	ADA72698 Rice gene
c 497	15	5.7	1380	4	AA554968	AA554968 Stephyloc	c 554	15	5.7	2000	7	ADA69039	ADA69039 Arabidops
c 498	15	5.7	1380	4	AAH23395	AAH23395 S. aureus	c 555	15	5.7	2003	4	AB119153	AB119153 Drosophil
c 499	15	5.7	1380	7	ACA46380	ACA46380 Prokaryot	c 556	15	5.7	2018	6	AB119154	AB119154 Arabidops
c 500	15	5.7	1389	6	AB213553	AB213553 Arabidops	c 557	15	5.7	2036	9	ADD69644	ADD69644 Human pol
c 501	15	5.7	1398	7	ACF74361	ACF74361 Stephyloc	c 558	15	5.7	2036	9	ADD69644	ADD69644 Human pol
c 502	15	5.7	1401	9	ADC40611	ADC40611 Putative	c 559	15	5.7	2036	9	ADD69644	ADD69644 Human pol
c 503	15	5.7	1401	9	ADC40609	ADC40609 Putative	c 560	15	5.7	2136	7	ABX08460	ABX08460 DNA encod
c 504	15	5.7	1420	4	AB117629	AB117629 Drosophil	c 561	15	5.7	2179	4	AAE58600	AAE58600 Human REC
c 505	15	5.7	1428	4	AA551247	AA551247 Enterococ	c 562	15	5.7	2183	4	AB125012	AB125012 Drosophil
c 506	15	5.7	1428	7	ACA18357	ACA18357 Prokaryot	c 563	15	5.7	2271	3	AA639453	AA639453 Arabidops
c 507	15	5.7	1431	4	AA553058	AA553058 Enterococ	c 564	15	5.7	2276	4	AB123704	AB123704 Drosophil
c 508	15	5.7	1443	3	AA635345	AA635345 Arabidops	c 565	15	5.7	2286	6	AA138066	AA138066 cDNA of n
c 509	15	5.7	1443	7	ACA22144	ACA22144 Prokaryot	c 566	15	5.7	2400	6	AB232122	AB232122 Candida a
c 510	15	5.7	1449	9	ADB31880	ADB31880 DNA encod	c 567	15	5.7	2457	6	AAH15791	AAH15791 Human cDN
c 511	15	5.7	1455	7	ACA61615	ACA61615 Human fat	c 568	15	5.7	2457	6	ABX95212	ABX95212 Human rec
c 512	15	5.7	1458	2	AA235672	AA235672 Glucanoba	c 569	15	5.7	2457	6	ABX95212	ABX95212 Human rec
c 513	15	5.7	1458	3	AA630816	AA630816 Arabidops	c 570	15	5.7	2457	6	ABX95212	ABX95212 Human rec
c 514	15	5.7	1460	3	AA635457	AA635457 Arabidops	c 571	15	5.7	2474	4	AB125010	AB125010 Human tra
c 515	15	5.7	1465	3	AA637393	AA637393 Arabidops	c 572	15	5.7	2481	4	AA525945	AA525945 Human cDN
c 516	15	5.7	1477	2	AA296342	AA296342 S. pneumo	c 573	15	5.7	2497	7	ABX73286	ABX73286 Human nov
c 517	15	5.7	1491	6	ABN67918	ABN67918 streptoco	c 574	15	5.7	2499	7	AC229300	AC229300 Prokaryot
c 518	15	5.7	1501	2	AAV42330	AAV42330 Agrocyphe	c 575	15	5.7	2541	4	AB127442	AB127442 Drosophil
c 519	15	5.7	1501	2	AAZ27424	AAZ27424 A. pedicel	c 576	15	5.7	2570	4	AB113332	AB113332 Drosophil



c 577	15	5.7	2598	4	AA164986	AA164986	Verteella
c 578	15	5.7	2604	4	AAH15797	AAH15797	Human cDN
c 579	15	5.7	2631	3	AA992471	AA992471	Shewanella
c 580	15	5.7	2652	3	AAA15173	AA671573	V. marinus
c 581	15	5.7	2672	4	AB123702	AB123702	Drosophila
c 582	15	5.7	2678	9	AD62602	AD62602	Human cDN
c 583	15	5.7	2680	4	AAH16335	AAH16335	Human cDN
c 584	15	5.7	2689	6	AB141575	AB141575	Human cDN
c 585	15	5.7	2711	3	AA48642	AA48642	Human cDN
c 586	15	5.7	2725	6	ABK35276	ABK35276	Rat Mp-10
c 587	15	5.7	2742	9	ADCG0986	ADCG0986	E. faeculi
c 588	15	5.7	2769	6	AB211334	AB211334	Human pol
c 589	15	5.7	2776	5	ABA20040	ABA20040	Human ner
c 590	15	5.7	2840	4	AAH14222	AAH14222	Human cDN
c 591	15	5.7	2840	6	AB153518	AB153518	Human rec
c 592	15	5.7	2840	6	ABA95211	ABA95211	Human mel
c 593	15	5.7	2840	9	ACF79542	ACF79542	Human tra
c 594	15	5.7	2841	2	AAV74488	AAV74488	Staphyloc
c 595	15	5.7	2844	4	AB122730	AB122730	Drosophila
c 596	15	5.7	2853	7	ACA37230	ACA37230	Prokaryot
c 597	15	5.7	2860	4	AAH42602	AAH42602	Nucleotid
c 598	15	5.7	2872	2	AAQ21001	AAQ21001	Murline re
c 599	15	5.7	2872	2	AAQ21001	AAQ21001	Murline re
c 600	15	5.7	2872	2	AAQ21001	AAQ21001	Murline re
c 601	15	5.7	2881	4	AAQ29853	AAQ29853	Mouse rec
c 602	15	5.7	2881	9	AAQ27019	AAQ27019	cDNA enco
c 603	15	5.7	2881	9	ADB93197	ADB93197	Human cDN
c 604	15	5.7	2942	7	ADA53471	ADA53471	Human cod
c 605	15	5.7	3021	4	AAH52380	AAH52380	S. epider
c 606	15	5.7	3034	6	ABQ14764	ABQ14764	Oligonuc
c 607	15	5.7	3034	6	ABQ14765	ABQ14765	Oligonuc
c 608	15	5.7	3098	4	AB167442	AB167442	H. pylori
c 609	15	5.7	3125	9	AD858074	AD858074	Human gen
c 610	15	5.7	3125	9	AD858074	AD858074	Human gen
c 611	15	5.7	3129	7	ACF03435	ACF03435	Mycoplasma
c 612	15	5.7	3148	4	AAH54695	AAH54695	S. epider
c 613	15	5.7	3148	6	ABQ70799	ABQ70799	Listeria
c 614	15	5.7	3173	4	AAH54390	AAH54390	S. epider
c 615	15	5.7	3199	5	AA687511	AA687511	DNA enco
c 616	15	5.7	3213	5	AA655545	AA655545	DNA enco
c 617	15	5.7	3251	4	AB103846	AB103846	Drosophila
c 618	15	5.7	3270	4	AB127756	AB127756	Drosophila
c 619	15	5.7	3278	7	ACCG0397	ACCG0397	Human cel
c 620	15	5.7	3295	4	AA536186	AA536186	Human car
c 621	15	5.7	3295	4	AAK71764	AAK71764	Human imm
c 622	15	5.7	3295	9	AA646880	AA646880	Human car
c 623	15	5.7	3308	3	AAA26917	AAA26917	Essential
c 624	15	5.7	3308	4	AAFG1599	AAFG1599	Staphyloc
c 625	15	5.7	3308	4	AA508068	AA508068	Staphyloc
c 626	15	5.7	3308	9	AD667446	AD667446	Antibacte
c 627	15	5.7	3308	9	AD673670	AD673670	Mutant ba
c 628	15	5.7	3344	4	AAH54738	AAH54738	S. epider
c 629	15	5.7	3368	5	AA575563	AA575563	DNA enco
c 630	15	5.7	3373	6	ABV99388	ABV99388	Human NOV
c 631	15	5.7	3410	4	AB118618	AB118618	Drosophila
c 632	15	5.7	3440	7	AB224210	AB224210	Human SLC
c 633	15	5.7	3481	7	AB224207	AB224207	Human SLC
c 634	15	5.7	3492	4	AA104161	AA104161	Human rep
c 635	15	5.7	3526	6	ABQ61182	ABQ61182	FLJ20047
c 636	15	5.7	3545	4	AA525965	AA525965	Human cDN
c 637	15	5.7	3545	7	ABK73306	ABK73306	Human nov
c 638	15	5.7	3562	4	AB106749	AB106749	Drosophila
c 639	15	5.7	3594	7	ACA20853	ACA20853	Prokaryot
c 640	15	5.7	3639	4	AA551721	AA551721	Staphyloc
c 641	15	5.7	3651	7	ACF74791	ACF74791	Staphyloc
c 642	15	5.7	3652	4	AB116754	AB116754	Drosophila
c 643	15	5.7	3654	4	AA554788	AA554788	Staphyloc
c 644	15	5.7	3654	7	ABT15084	ABT15084	Pathogen
c 645	15	5.7	3654	7	ACA19742	ACA19742	Prokaryot
c 646	15	5.7	3658	4	AB117782	AB117782	Drosophila
c 647	15	5.7	3666	4	AAH54179	AAH54179	S. epider
c 648	15	5.7	3672	7	ACA46452	ACA46452	Prokaryot
c 649	15	5.7	3674	6	AB557736	AB557736	DNA enco
c 650	15	5.7	3754	2	AAV74869	AAV74869	Staphyloc
c 651	15	5.7	3809	4	AB110069	AB110069	Drosophila
c 652	15	5.7	3870	4	AAH84271	AAH84271	Human imm
c 653	15	5.7	3934	2	AA197233	AA197233	Trimmed e
c 654	15	5.7	4020	7	AB224206	AB224206	Human SLC
c 655	15	5.7	4034	4	AB109372	AB109372	Drosophila
c 656	15	5.7	4038	4	AB129090	AB129090	Drosophila
c 657	15	5.7	4116	6	ABK24522	ABK24522	EIF-2alpha
c 658	15	5.7	4125	4	AAH84260	AAH84260	Human imm
c 659	15	5.7	4129	4	AAH84261	AAH84261	Human imm
c 660	15	5.7	4200	4	AB117628	AB117628	Drosophila
c 661	15	5.7	4204	4	AB121160	AB121160	Drosophila
c 662	15	5.7	4327	6	AB556408	AB556408	Human DNA
c 663	15	5.7	4361	5	AA588467	AA588467	DNA enco
c 664	15	5.7	4398	3	AAK43063	AAK43063	Abi1dops
c 665	15	5.7	4409	6	ABK89163	ABK89163	cDNA enco
c 666	15	5.7	4441	3	AAA47759	AAA47759	RTAA0160
c 667	15	5.7	4441	6	ABK69961	ABK69961	Pancreas
c 668	15	5.7	4441	6	ABK69961	ABK69961	Pancreas
c 669	15	5.7	4455	4	AB103328	AB103328	Drosophila
c 670	15	5.7	4465	6	ABK77932	ABK77932	Hypoxia-r
c 671	15	5.7	4465	7	ABK08805	ABK08805	Angiogene
c 672	15	5.7	4465	8	ACC57774	ACC57774	Human cyc
c 673	15	5.7	4465	9	ACF79931	ACF79931	Breast ca
c 674	15	5.7	4496	7	ACA03925	ACA03925	cDNA down
c 675	15	5.7	4496	7	ABK63478	ABK63478	Human cDN
c 676	15	5.7	4582	4	AAK72026	AAK72026	Human imm
c 677	15	5.7	4594	2	AAV74511	AAV74511	Human imm
c 678	15	5.7	4623	4	AB112280	AB112280	Staphyloc
c 679	15	5.7	4750	9	AD825722	AD825722	Human cDN
c 680	15	5.7	4802	7	AB268141	AB268141	Human sec
c 681	15	5.7	4802	9	AB274620	AB274620	Secreted
c 682	15	5.7	4802	9	AD221011	AD221011	Human sec
c 683	15	5.7	4910	4	AB112036	AB112036	Human sec
c 684	15	5.7	4997	7	ACA47636	ACA47636	Prokaryot
c 685	15	5.7	4998	4	AAK65573	AAK65573	Human imm
c 686	15	5.7	5082	6	ABQ70953	ABQ70953	Listeria
c 687	15	5.7	5151	4	AB129840	AB129840	Drosophila
c 688	15	5.7	5251	4	AB115640	AB115640	Drosophila
c 689	15	5.7	5251	4	AA571144	AA571144	DNA enco
c 690	15	5.7	5251	9	ADC35857	ADC35857	Drosophila

691	15	5.7	5373	4	ABU16748	Ab116748 Drosophila	748	15	5.7	10207	7	AA151838	AA151838 Stephyloc
692	15	5.7	5556	4	ABU09460	Ab109460 Drosophila	749	15	5.7	10207	7	AB277350	AB277350 Nucleoid
693	15	5.7	5721	6	ABG71037	Abg71037 listeria	750	15	5.7	10267	6	ABV99390	ABV99390 Human NOV
694	15	5.7	5740	3	AAA61521	AAa61521 A. vitis	751	15	5.7	10280	4	ABU17233	ABU17233 Drosophila
695	15	5.7	5740	3	AAA61522	AAa61522 A. vitis	752	15	5.7	10382	4	AAK67484	AAK67484 Human
696	15	5.7	5758	6	ABU32660	Ab132660 Human	753	15	5.7	10487	4	ABU13186	ABU13186 Drosophila
697	15	5.7	5798	6	ABU33666	Ab133666 Human	754	15	5.7	10945	6	ABK28333	ABK28333 DNA trans
698	15	5.7	5885	4	ABU28882	Ab128882 Drosophila	755	15	5.7	10963	4	ABU09896	ABU09896 Human
699	15	5.7	5966	2	AAV74333	AAv74333 Stephyloc	756	15	5.7	11327	4	ADA20274	ADA20274 Human
700	15	5.7	6042	6	ABU33945	Ab133945 Human	757	15	5.7	11327	4	ADA20274	ADA20274 Human
701	15	5.7	6056	4	AA546363	AAa46363 Tumour su	758	15	5.7	11715	1	AAAB1564	AAAB1564 Genomic s
702	15	5.7	6056	6	ABU32780	Ab132780 Human	759	15	5.7	11724	1	AAAB1564	AAAB1564 Genomic s
703	15	5.7	6123	6	ABU33036	Ab133036 Human	760	15	5.7	11724	1	AAAB1564	AAAB1564 Genomic s
704	15	5.7	6796	4	ABU04318	Ab104318 Drosophila	761	15	5.7	11724	2	AAK73497	AAK73497 Human
705	15	5.7	7040	9	ABE09900	ABe09900 Human 5'	762	15	5.7	11725	2	AAK73497	AAK73497 Human
706	15	5.7	7040	9	ABE09900	ABe09900 Human 5'	763	15	5.7	11725	2	AAK73497	AAK73497 Human
707	15	5.7	7080	4	ABU10068	Ab110068 Drosophila	764	15	5.7	11725	2	AAK73497	AAK73497 Human
708	15	5.7	7116	4	ABU03328	Ab103328 Drosophila	765	15	5.7	11725	2	AAK73497	AAK73497 Human
709	15	5.7	7143	4	ABU06748	Ab106748 Drosophila	766	15	5.7	11802	2	AAV74381	AAV74381 DNA encod
710	15	5.7	7143	6	ABU32983	Ab132983 Human	767	15	5.7	12509	4	ABU19152	ABU19152 Drosophila
711	15	5.7	7320	2	AAV68081	AAv68081 H. pylori	768	15	5.7	12592	4	ABU17232	ABU17232 Drosophila
712	15	5.7	7346	6	ABU32344	Ab132344 Human	769	15	5.7	13376	6	ABU32582	ABU32582 Human
713	15	5.7	7490	6	ABU32282	Ab132282 Human	770	15	5.7	13784	6	ABU40062	ABU40062 Human
714	15	5.7	7494	2	AAV74380	AAv74380 Stephyloc	771	15	5.7	13798	4	ABU08500	ABU08500 Human
715	15	5.7	7599	4	AAU04162	AAu04162 Human	772	15	5.7	13860	7	ACU44867	ACU44867 Human
716	15	5.7	7681	6	ABU31026	Ab131026 Operon D	773	15	5.7	13878	9	ADC01230	ADC01230 Human
717	15	5.7	7693	6	ABU31023	Ab131023 Operon A	774	15	5.7	13917	6	ADC01230	ADC01230 Human
718	15	5.7	7693	6	ABU31024	Ab131024 Operon B	775	15	5.7	13965	8	ADC01230	ADC01230 Human
719	15	5.7	7876	4	ABU03166	Ab103166 Drosophila	776	15	5.7	14024	4	AA536381	AA536381 Human
720	15	5.7	8054	2	AAAB8925	AAa8925 Candida a	777	15	5.7	14024	5	AA536381	AA536381 Human
721	15	5.7	8224	6	ABU31027	Ab131027 Operon E	778	15	5.7	14024	5	AA536381	AA536381 Human
722	15	5.7	8235	6	ABU31025	Ab131025 Operon C	779	15	5.7	14024	9	ABU33494	ABU33494 Human
723	15	5.7	8400	6	ABU31029	Ab131029 Operon G	780	15	5.7	14124	5	ABU19503	ABU19503 Human
724	15	5.7	8635	4	ABU79024	ABu79024 E. coli C	781	15	5.7	14156	7	AA535989	AA535989 Human
725	15	5.7	8643	4	ABU88854	ABa88854 Escherich	782	15	5.7	14156	7	AA535989	AA535989 Human
726	15	5.7	8734	4	AAK72027	AAk72027 Human	783	15	5.7	14171	7	AAK73152	AAK73152 Human
727	15	5.7	8776	6	ABU40067	ABu40067 Human	784	15	5.7	14171	7	ABK60140	ABK60140 Human
728	15	5.7	8790	9	ADD13780	Ad13780 Plasmid P	785	15	5.7	14683	7	ACC48945	ACC48945 Escherich
729	15	5.7	9005	4	ABU29370	Ab129370 Drosophila	786	15	5.7	14623	6	ADD31039	ADD31039 Plasmid c
730	15	5.7	9015	6	ABU70188	Ab170188 Chromatid	787	15	5.7	15240	3	AAA34995	AAA34995 Human
731	15	5.7	9015	6	AA561138	AAa61138 Human gen	788	15	5.7	15240	3	AAA34995	AAA34995 Human
732	15	5.7	9159	5	AA587481	AAa87481 DNA encod	789	15	5.7	15240	3	AAAF2117	AAAF2117 Human
733	15	5.7	9193	6	ABV99389	ABv99389 Human NOV	790	15	5.7	15240	7	ABE26811	ABE26811 Human
734	15	5.7	9212	2	AAU13271	AAu13271 Enterococ	791	15	5.7	15405	4	ABU03146	ABU03146 Human
735	15	5.7	9212	6	ABV99066	ABv99066 Enterococ	792	15	5.7	15933	4	ABU30408	ABU30408 Human
736	15	5.7	9263	4	ABU15172	Ab115172 Drosophila	793	15	5.7	15935	4	ABU06114	ABU06114 Human
737	15	5.7	9451	6	ABV97450	ABv97450 Human cyc	794	15	5.7	15998	4	AAU37153	AAU37153 Human
738	15	5.7	9453	3	AAA34994	AAa34994 Human	795	15	5.7	15998	7	ABK60141	ABK60141 Human
739	15	5.7	9453	3	AAE21116	AAe21116 Human low	796	15	5.7	17727	5	AA587482	AA587482 DNA encod
740	15	5.7	9453	6	ABU65014	Ab165014 Lung cance	797	15	5.7	18488	6	ABU28632	ABU28632 Human
741	15	5.7	9453	6	ABK84194	ABk84194 Human cDN	798	15	5.7	18877	4	AAK67485	AAK67485 Human
742	15	5.7	9453	6	ABU29610	ABu29610 Human nuc	799	15	5.7	19191	4	AAK67485	AAK67485 Human
743	15	5.7	9680	4	ABU20930	Ab120930 Drosophila	800	15	5.7	19227	2	AAV81944	AAV81944 Human
744	15	5.7	9814	3	AAK79596	AAk79596 Virulence	801	15	5.7	19227	2	AAV81944	AAV81944 Human
745	15	5.7	9814	6	ABU83473	ABu83473 Pasteurel	802	15	5.7	19738	6	ABU01436	ABU01436 Human
746	15	5.7	9859	6	ABU34133	Ab134133 Human imm	803	15	5.7	19861	5	AA587516	AA587516 Human
747	15	5.7	10207	2	AAQ55134	AAq55134 Stephyloc	804	15	5.7	20776	4	ABU30040	ABU30040 Human

805	15	5.7	21708	AB114604	Drosophil	Ab114604	Drosophil	c	862	15	5.7	96599	9	AD872650	Human	JAK	Abd72650	Human	JAK
c	806	15	5.7	21724	AA526629	Human	gen	c	863	15	5.7	96596	9	AD852887	Mouse	F1a	Adc85287	Mouse	F1a
c	807	15	5.7	21724	AA526625	Human	Imm	c	864	15	5.7	96597	8	AD802807	Mouse	F1a	Adc02807	Mouse	F1a
c	808	15	5.7	21724	AB73378	Human	nov	c	865	15	5.7	96599	8	AD872545	Mouse	F1a	Adb72545	Mouse	F1a
c	810	15	5.7	21727	AA526630	Human	gen	c	866	15	5.7	96599	8	AD802747	Mouse	F1a	Adb02747	Mouse	F1a
c	811	15	5.7	21727	AA526630	Human	gen	c	867	15	5.7	96599	8	AD872485	Mouse	F1a	Adb72485	Mouse	F1a
c	812	15	5.7	21727	AA526630	Human	nov	c	868	15	5.7	96599	9	AD852227	Mouse	F1a	Adc85227	Mouse	F1a
c	813	15	5.7	22875	AA526694	Human	nov	c	869	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	814	15	5.7	23821	AA526469	Human	nov	c	870	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	815	15	5.7	24099	AA526469	Human	rep	c	871	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	816	15	5.7	25559	AA526469	Human	rep	c	872	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	817	15	5.7	27425	AA526469	Human	rep	c	873	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	818	15	5.7	28091	AA526469	Human	rep	c	874	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	819	15	5.7	28091	AA526469	Human	rep	c	875	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	820	15	5.7	28120	AA526469	Human	rep	c	876	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	821	15	5.7	28560	AA526469	Human	rep	c	877	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	822	15	5.7	30037	AA526469	Human	rep	c	878	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	823	15	5.7	32132	AA526469	Human	rep	c	879	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	824	15	5.7	32132	AA526469	Human	rep	c	880	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	825	15	5.7	32132	AA526469	Human	rep	c	881	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	826	15	5.7	32200	AA526469	Human	rep	c	882	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	827	15	5.7	32200	AA526469	Human	rep	c	883	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	828	15	5.7	32768	AA526469	Human	rep	c	884	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	829	15	5.7	32768	AA526469	Human	rep	c	885	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	830	15	5.7	34750	AA526469	Human	rep	c	886	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	831	15	5.7	39651	AA526469	Human	rep	c	887	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	832	15	5.7	40138	AA526469	Human	rep	c	888	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	833	15	5.7	40138	AA526469	Human	rep	c	889	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	834	15	5.7	40138	AA526469	Human	rep	c	890	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	835	15	5.7	41104	AA526469	Human	rep	c	891	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	836	15	5.7	41587	AA526469	Human	rep	c	892	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	837	15	5.7	41587	AA526469	Human	rep	c	893	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	838	15	5.7	49984	AA526469	Human	rep	c	894	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	839	15	5.7	53855	AA526469	Human	rep	c	895	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	840	15	5.7	54677	AA526469	Human	rep	c	896	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	841	15	5.7	54677	AA526469	Human	rep	c	897	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	842	15	5.7	54677	AA526469	Human	rep	c	898	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	843	15	5.7	54677	AA526469	Human	rep	c	899	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	844	15	5.7	54677	AA526469	Human	rep	c	900	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	845	15	5.7	56153	AA526469	Human	rep	c	901	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	846	15	5.7	56583	AA526469	Human	rep	c	902	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	847	15	5.7	56583	AA526469	Human	rep	c	903	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	848	15	5.7	56866	AA526469	Human	rep	c	904	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	849	15	5.7	58181	AA526469	Human	rep	c	905	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	850	15	5.7	58181	AA526469	Human	rep	c	906	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	851	15	5.7	58181	AA526469	Human	rep	c	907	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	852	15	5.7	58181	AA526469	Human	rep	c	908	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	853	15	5.7	65654	AA526469	Human	rep	c	909	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	854	15	5.7	69173	AA526469	Human	rep	c	910	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	855	15	5.7	69173	AA526469	Human	rep	c	911	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	856	15	5.7	69173	AA526469	Human	rep	c	912	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	857	15	5.7	90091	AA526469	Human	rep	c	913	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	858	15	5.7	90100	AA526469	Human	rep	c	914	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	859	15	5.7	90100	AA526469	Human	rep	c	915	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	860	15	5.7	96587	AA526469	Human	rep	c	916	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	861	15	5.7	96589	AA526469	Human	rep	c	917	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a
c	862	15	5.7	96589	AA526469	Human	rep	c	918	15	5.7	96649	7	ACC55150	Mouse	F1a	Adc55150	Mouse	F1a

c 919 14 5.4 24 3 AAC73253  
c 920 14 5.4 24 6 ABS61668  
c 921 14 5.4 25 4 AAF58028  
c 922 14 5.4 25 8 ACT170181  
c 923 14 5.4 25 8 ACT125258  
c 924 14 5.4 29 2 AAT63585  
c 925 14 5.4 29 3 AAA26841  
c 926 14 5.4 33 6 AAI19219  
c 927 14 5.4 42 3 AAC73255  
c 928 14 5.4 47 3 AAZ66448  
c 929 14 5.4 51 4 AAL30743  
c 930 14 5.4 51 4 AAL30744  
c 931 14 5.4 51 5 ABLO0943  
c 932 14 5.4 51 5 ABLO0061  
c 933 14 5.4 60 6 ABN46607  
c 934 14 5.4 70 2 AAI12874  
c 935 14 5.4 70 2 AAI11711  
c 936 14 5.4 80 2 AAQ33826  
c 937 14 5.4 90 8 AOC70036  
c 938 14 5.4 98 7 AOC49875  
c 939 14 5.4 98 9 ADE27712  
c 940 14 5.4 103 6 ABR45891  
c 941 14 5.4 105 8 ADA73772  
c 942 14 5.4 105 8 ADA02219  
c 943 14 5.4 105 9 ADB71958  
c 944 14 5.4 106 8 ADN02226  
c 945 14 5.4 106 9 ADB71965  
c 946 14 5.4 118 3 AAC25924  
c 947 14 5.4 120 3 AAA26772  
c 948 14 5.4 136 3 AAC05487  
c 949 14 5.4 140 8 ACH31705  
c 950 14 5.4 143 2 AAI10604  
c 951 14 5.4 151 4 AAI37063  
c 952 14 5.4 163 4 AAL24209  
c 953 14 5.4 169 5 ABV60150  
c 954 14 5.4 174 7 ABX86363  
c 955 14 5.4 176 2 AAV86898  
c 956 14 5.4 178 4 AAI26036  
c 957 14 5.4 178 4 AAI73194  
c 958 14 5.4 178 4 ABA38633  
c 959 14 5.4 178 4 AAI53623  
c 960 14 5.4 178 4 AAI47794  
c 961 14 5.4 178 4 AAI21629  
c 962 14 5.4 178 4 ABS47519  
c 963 14 5.4 178 6 ABN25863  
c 964 14 5.4 178 6 ABS21804  
c 965 14 5.4 187 6 ABN62833  
c 966 14 5.4 188 3 AAT21028  
c 967 14 5.4 189 3 AAC27854  
c 968 14 5.4 194 7 ACD94370  
c 969 14 5.4 195 6 ABN91231  
c 970 14 5.4 200 6 ABQ73052  
c 971 14 5.4 203 3 AAC26282  
c 972 14 5.4 204 7 ABZ59063  
c 973 14 5.4 204 8 ADA32410  
c 974 14 5.4 205 3 AAC30061  
c 975 14 5.4 209 7 ACD92334

Aac73253 Forward P  
Abs61668 Analyte s  
Aaf58028 Temposo  
Act170181 Human mic  
Act125258 Human mic  
Aat63585 PCR prime  
Aa26841 Trichospor  
Aai19219 Kringle P  
Aac73255 Single ba  
Aaz66448 Human map  
Aal30743 Human SNP  
Aal30744 Human SNP  
Ab100943 Human aml  
Ab100061 Human sll  
Abn46607 Human spl  
Aai12874 Human bla  
Aai11711 Human bla  
Aa33826 Domstre  
Aac70036 PCR prime  
Aac49875 Synthetic  
Ade27712 Act1-CCR4  
Abk45891 cDNA enco  
Ada73772 Carcinoma  
Ada02219 Mouse car  
Adb71958 Mouse car  
Ada02226 Mouse car  
Adb71965 Mouse car  
Aac25924 Human sec  
Aa26772 Trichospor  
Aac05487 Human sec  
Ach31705 Human bon  
Aai10604 Human bla  
Aai37063 Human col  
Aai24209 Human bre  
Abv60150 Human pro  
Abx86363 Corn ear-  
Aav86898 EST clone  
Aai26036 Probe #15  
Aba73194 Human toe  
Aai53623 Probe #22  
Aba38633 Probe #17  
Aak47794 Human bon  
Aai21629 Human bra  
Abn47519 Human liv  
Abn25863 Human ORF  
Abs21804 Human gen  
Abn62833 Human can  
Aat21028 Human gen  
Aac27854 Human sec  
Aac94370 Human col  
Abn91231 StephyLoc  
Abq73052 Human GPR  
Aac26282 Human sec  
Abz59063 Hyperperons  
Ada32410 DNA encod  
Aac30061 Human sec  
Aac92334 Human col

976 14 5.4 210 6 ABN91585  
c 977 14 5.4 213 4 AAS30318  
c 978 14 5.4 213 4 AAL01999  
c 979 14 5.4 225 6 AEN77100  
980 14 5.4 228 2 AAI13874  
981 14 5.4 228 6 ABS99669  
c 982 14 5.4 230 4 AAK61368  
c 983 14 5.4 234 3 AAC16103  
c 984 14 5.4 240 3 AAC28915  
c 985 14 5.4 240 6 AAC02395  
c 986 14 5.4 240 3 AAC20425  
c 987 14 5.4 240 7 ABZ68409  
c 988 14 5.4 246 4 AAS49115  
c 989 14 5.4 246 4 AAK79929  
990 14 5.4 246 7 AAI16353  
991 14 5.4 248 3 AAC02463  
c 992 14 5.4 250 4 AAI33619  
c 993 14 5.4 251 2 AAI12579  
c 994 14 5.4 251 3 AAC27012  
c 995 14 5.4 255 5 AAH82022  
c 996 14 5.4 262 5 ABV15216  
c 997 14 5.4 262 6 AB166051  
c 998 14 5.4 262 6 AB167339  
c 999 14 5.4 263 3 AAC12015  
1000 14 5.4 263 8 ACH21976

ALIGNMENTS

RESULT 1  
AAA68250  
ID. AAA68250 standard; DNA; 261 BP.  
XX  
AC AAA68250;  
XX  
XX 15-SEP-2003 (revised)  
DT 06-AUG-2003 (revised)  
DT 27-OCT-2000 (first entry)  
XX  
DE Bacteriophage 77 77ORF043 nucleotide sequence.  
XX  
KW Bacteriophage; antimicrobial; genome; identification; antibacterial;  
bacterial growth inhibition; bacterial infection; ds.  
XX  
XX Staphylococcus aureus; bacteriophage 77.  
XX  
XX WO200032825-A2.  
XX  
XX 08-JUN-2000.  
XX  
XX 03-DEC-1999; 99WO-1B002040.  
XX  
XX 03-DEC-1999; 99WO-1B002040.  
XX  
XX 03-DEC-1998; 98US-0110992P.  
XX 03-JUN-1999; 99US-00326144.  
XX 28-SEP-1999; 99US-00407804.  
XX 30-SEP-1999; 99US-0157218P.

PR 01-DEC-1999; 99US-0168777P.  
PR 02-DEC-1999; 99US-00454252.  
XX  
PA (PHAG-) PHAGETECH INC.  
XX  
PI Pelletier J, Gros P, Dubow M;  
XX WPI; 2000-412361/35.  
DR P-PSDB; AAB16529.  
XX  
XX Identifying a bacteriophage coding region for treating bacterial  
PT infections comprises identifying a nucleic acid encoding a product that  
PT inhibits bacteria when a bacteriophage infects a bacterium.  
XX  
PS Disclosure; Page 157; 456pp; English.  
XX  
XX The present invention describes a method for identifying a bacteriophage  
CC coding region encoding a product active on an essential bacterial target.  
CC The method comprises identifying a nucleic acid sequence encoding a gene  
CC product that provides a bacteria-inhibiting function when an  
CC uncharacterized bacteriophage infects a pathogenic bacterium. The  
CC compound active on a target of a bacteriophage inhibitor protein in a  
CC bacteria is used to treat or prevent a bacterial infection in an animal.  
CC AAB69243 to AAB69442 and AAB16523 to AAB16954 represent bacteriophage  
CC nucleotide and protein sequences which are used in the exemplification of  
CC the present invention. (Updated on 06-AUG-2003 to correct OS field.)  
XX  
XX Sequence 261 BP; 105 A; 36 C; 49 G; 71 T; 0 U; 0 Other;  
SQ  
Query Match 100.0%; Score 261; DB 3; Length 261;  
Best Local Similarity 100.0%; Pred. No. 3.6e-121;  
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ATGATTACGAATAGCGGAATCATACGCAAAATATTCATGTTAAGCATTCGATTT 60  
DB 1 ATGATTACGAATAGCGGAATCATACGCAAAATATTCATGTTAAGCATTCGATTT 60  
QY 61 AAGCTATTCATTTTAAAGGTCATATGGCATATCATACAGTTAAAGATGAAACAC 120  
DB 61 AAGCTATTCATTTTAAAGGTCATATGGCATATCATACAGTTAAAGATGAAACAC 120  
QY 121 GTACCAATTAACATGCTATGTCGTAGATGAAGATGATTAGTGGCATCGACTTA 180  
DB 121 GTACCAATTAACATGCTATGTCGTAGATGAAGATGATTAGTGGCATCGACTTA 180  
QY 181 TTAAACCAAGCAATGATGATGATGAAAGCAACAGACGACAGAGACTAAT 240  
DB 181 TTAAACCAAGCAATGATGATGATGAAAGCAACAGACGACAGAGACTAAT 240  
QY 241 AACTAGTCATGAAGTGTAG 261  
DB 241 AACTAGTCATGAAGTGTAG 261

RESULT 2  
AAB69253

ID AAB69253 standard; DNA; 297 BP.  
XX  
XX AAB69253;  
AC  
XX 15-SEP-2003 (revised)  
DT 06-AUG-2003 (revised)  
DT 27-OCT-2000 (first entry)  
XX  
XX Bacteriophage 77 70RF182 nucleotide sequence.  
XX  
XX Bacteriophage; antimicrobial; genome; identification; antibacterial;  
KW bacterial growth inhibition; bacterial infection; ds.  
XX  
XX *Staphylococcus aureus*; bacteriophage 77.  
XX  
XX WO200032825-A2.  
XX  
XX 08-JUN-2000.  
XX  
XX 03-DEC-1999; 99WO-1B002040.  
PF  
XX 03-DEC-1998; 98US-0110992P.  
PR 03-JUN-1999; 99US-00326144.  
PR 28-SEP-1999; 99US-00407804.  
PR 30-SEP-1999; 99US-0157218P.  
PR 01-DEC-1999; 99US-0168777P.  
PR 02-DEC-1999; 99US-00454252.  
XX  
XX (PHAG-) PHAGETECH INC.  
XX  
XX Pelletier J, Gros P, Dubow M;  
XX WPI; 2000-412361/35.  
DR P-PSDB; AAB16528.  
XX  
XX Identifying a bacteriophage coding region for treating bacterial  
PT infections comprises identifying a nucleic acid encoding a product that  
PT inhibits bacteria when a bacteriophage infects a bacterium.  
XX  
XX Disclosure; Page 165; 456pp; English.  
XX  
XX The present invention describes a method for identifying a bacteriophage  
CC coding region encoding a product active on an essential bacterial target.  
CC The method comprises identifying a nucleic acid sequence encoding a gene  
CC product that provides a bacteria-inhibiting function when an  
CC uncharacterized bacteriophage infects a pathogenic bacterium. The  
CC compound active on a target of a bacteriophage inhibitor protein in a  
CC bacteria is used to treat or prevent a bacterial infection in an animal.  
CC AAB69243 to AAB69442 and AAB16523 to AAB16954 represent bacteriophage  
CC nucleotide and protein sequences which are used in the exemplification of  
CC the present invention. (Updated on 06-AUG-2003 to correct OS field.)  
XX  
XX Sequence 297 BP; 123 A; 40 C; 57 G; 77 T; 0 U; 0 Other;  
SQ  
Query Match 100.0%; Score 261; DB 3; Length 297;  
Best Local Similarity 100.0%; Pred. No. 3.6e-121;

Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGTATTACGAATAAGCGAATCATACGAAAAATATTCATGTTAAGGATTCGATTTT 60  
DB 37 ATGTATTACGAATAAGCGAATCATACGAAAAATATTCATGTTAAGGATTCGATTTT 96  
QY 61 AAGCTATTCATTTTAAAGGTCATATGGGCATTCATACATACAGTTTAAAGATAGAAC 120  
DB 97 AAGCTATTCATTTTAAAGGTCATATGGGCATTCATACATACAGTTTAAAGATAGAAC 156  
QY 121 GTACCAATTAAACATGCTTATGTGCTAGATGAGATGACTTATGATGGCATCAAGCTTA 180  
DB 157 GTACCAATTAAACATGCTTATGTGCTAGATGAGATGACTTATGATGGCATCAAGCTTA 216  
QY 181 TTTAACCAAGCATATGATGATGATTGAAAGAACACAGACAGACAGACAGACTTAAT 240  
DB 217 TTTAACCAAGCATATGATGATGATTGAAAGAACACAGACAGACAGACAGACTTAAT 276  
QY 241 AACTTAGTCATGAAATGGTAG 261  
DB 277 AACTTAGTCATGAAATGGTAG 297

RESULT 3  
AAA68247  
ID AAA68247 standard; DNA; 41708 BP.  
XX  
AC AAA68247;  
XX  
DT 15-SEP-2003 (revised)  
DT 06-AUG-2003 (revised)  
DT 27-OCT-2000 (first entry)  
XX  
DE Bacteriophage 77 complete genome sequence.  
XX  
KW Bacteriophage; antimicrobial; genome; identification; antibacterial;  
KW bacterial growth inhibition; bacterial infection; ds.  
XX  
OS *Staphylococcus aureus*; bacteriophage 77.  
XX  
PN WO20032825-A2.  
XX  
PD 08-JUN-2000.  
XX  
PF 03-DEC-1999; 99WO-1B002040.  
XX  
PR 03-DEC-1998; 98US-0110992P.  
PR 03-JUN-1999; 99US-00326144.  
PR 28-SEP-1999; 99US-00407804.  
PR 30-SEP-1999; 99US-0157218P.  
PR 01-DEC-1998; 99US-0168777P.  
PR 02-DEC-1999; 99US-00454252.  
XX  
XX (PHAG-) PHAGETECH INC.  
XX  
XX  
XX  
PI Pelletier J, Gros P, Dubow M;  
XX

DR WPI; 2000-412361/35.  
XX  
XX  
PT Identifying a bacteriophage coding region for treating bacterial  
PT infections comprises identifying a nucleic acid encoding a product that  
PT inhibits bacteria when a bacteriophage infects a bacterium.  
XX  
PS Example 3; Page 141-151; 456pp; English.  
XX  
CC The present invention describes a method for identifying a bacteriophage  
CC coding region encoding a product active on an essential bacterial target.  
CC The method comprises identifying a nucleic acid sequence encoding a gene  
CC product that provides a bacteria-inhibiting function when an  
CC uncharacterized bacteriophage infects a pathogenic bacterium. The  
CC compound active on a target of a bacteriophage inhibitor protein in a  
CC bacteria is used to treat or prevent a bacterial infection in an animal.  
CC AAA68243 to AAA69442 and AAB16523 to AAB16954 represent bacteriophage  
CC nucleotide and protein sequences which are used in the exemplification of  
CC the present invention. (updated on 06-AUG-2003 to correct 05 field.)  
CC (updated on 15-SEP-2003 to standardise 05 field)  
XX  
SQ Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 U; 0 Other;  
Query Match 100.0%; Score 261; DB 3; Length 41708;  
Best Local Similarity 100.0%; Pred. No. 2.9e-121;  
Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGTATTACGAATAAGCGAATCATACGAAAAATATTCATGTTAAGGATTCGATTTT 60  
DB 29304 ATGTATTACGAATAAGCGAATCATACGAAAAATATTCATGTTAAGGATTCGATTTT 29363  
QY 61 AAGCTATTCATTTTAAAGGTCATATGGGCATTCATACATACAGTTTAAAGATAGAAC 120  
DB 29364 AAGCTATTCATTTTAAAGGTCATATGGGCATTCATACATACAGTTTAAAGATAGAAC 29423  
QY 121 GTACCAATTAAACATGCTTATGTGCTAGATGAGATGACTTATGATGGCATCAAGCTTA 180  
DB 29424 GTACCAATTAAACATGCTTATGTGCTAGATGAGATGACTTATGATGGCATCAAGCTTA 29483  
QY 181 TTTAACCAAGCATATGATGATGATTGAAAGAACACAGACAGACAGACAGACTTAAT 240  
DB 29484 TTTAACCAAGCATATGATGATGATTGAAAGAACACAGACAGACAGACAGACTTAAT 29543  
QY 241 AACTTAGTCATGAAATGGTAG 261  
DB 29544 AACTTAGTCATGAAATGGTAG 29564

RESULT 4  
AAC86106  
ID AAC86106 standard; cDNA; 41708 BP.  
XX  
AC AAC86106;  
XX  
DT 06-AUG-2003 (revised)  
DT 29-AUG-2001 (first entry)  
XX  
XX Complete genome of bacteriophage 77.  
DE

XX DnaI; S. aureus; inhibitor; bacteriophage 77; ORF 104; phage 77ORF104;  
 KW screening assay; ss.  
 XX Bacteriophage.  
 OS  
 XX WO200146383-A2.  
 PN  
 XX 28-JUN-2001.  
 PD  
 XX 21-DEC-2000; 2000WO-US035180.  
 PF  
 XX 22-DEC-1999; 9SUS-00470512.  
 PR 12-OCT-2000; 2000US-00689952.  
 XX  
 PA (PHAG-) PHAGETECH INC.  
 XX (WILL/) WILLIAMS K M.  
 XX  
 PI Pollettler J, Groe P, Dubow M;  
 XX WPI; 2001-418052/44.  
 DR  
 XX Novel DnaI polypeptides useful for treating and diagnosing microbial,  
 PT preferably bacterial, diseases such as those caused by staphylococcus  
 PT aureus.  
 XX  
 XX Diacloaure; Flg 2; 107pp; English.  
 XX  
 CC This sequence represents the genome of Bacteriophage 77. The growth  
 CC inhibitory gene product of ORF 104 interacts with DnaI derived from S.  
 CC aureus, to form the basis of a screening assay. DnaI polypeptides and  
 CC polynucleotides are useful for treating microbial, preferably bacterial,  
 CC especially staphylococcal, infections. DnaI polypeptides and  
 CC polynucleotides are useful for biological, diagnostic, prophylactic,  
 CC clinical and therapeutic use, and as components in databases useful for  
 CC search analyses as well as in sequence analysis algorithms. (Updated on  
 CC 06-AUG-2003 to correct OS field.)  
 XX  
 SQ Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 U; 0 Other;  
 Query Match 100.0%; Score 261; DB 4; Length 41708;  
 Best Local Similarity 100.0%; Pred. No. 2.9e-121;  
 Matches 261; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGTATTACGAATAGCGAAATCATACGCAAAATATTATCATGTTACGATTCGATTTT 60  
 DB 29304 ATGTATTACGAATAGCGAAATCATACGCAAAATATTATCATGTTACGATTCGATTTT 29363  
 QY 61 AAGCTATTCAATTTTAAAGGTCAATATGGGCAATCATACAGTATTAAGATATGAACAAC 120  
 DB 29364 AAGCTATTCAATTTTAAAGGTCAATATGGGCAATCATACAGTATTAAGATATGAACAAC 29423  
 QY 121 GTACCAATTAAACATGCTTATGTCGTAGATGAAATGACTAGATATGGCATCAAGCTTA 180  
 DB 29424 GTACCAATTAAACATGCTTATGTCGTAGATGAAATGACTAGATATGGCATCAAGCTTA 29483  
 QY 181 TTAAACCAAGCAATAGATGATGATTGAAGAAACAGACAGACAGACGATTAATT 240

DB 29484 TTTAACCAGCAATAGATGATGATTGAAGAAACAGACAGACAGACGATTAATT 29543  
 QY 241 AACTAGTCATGAATGGTAG 261  
 DB 29544 AACTAGTCATGAATGGTAG 29564

RESULT 5  
 ACF72925  
 ID ACF72925 standard; DNA; 267 BP.  
 XX  
 AC ACF72925;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Staphylococcus aureus DNA #605.  
 XX  
 KW Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis;  
 KW enzymatic assay; antibiotic target; gene; ds.  
 XX  
 OS Staphylococcus aureus.  
 XX  
 PN WO200294868-A2.  
 PD 28-NOV-2002.  
 XX  
 PF 27-MAR-2002; 2002WO-18002637.  
 XX  
 PR 27-MAR-2001; 2001GB-00007661.  
 XX  
 PA (CHIR-) CHIRON SPA.  
 XX  
 PI Masignani V, More M, Scarselli M;  
 XX WPI; 2003-120786/11.  
 DR P-PSDB; ABMT1365.  
 XX  
 PT New Staphylococcus aureus protein, useful as a vaccine for treating or  
 PT preventing Staphylococcal infection, specifically an infection caused by  
 PT S. aureus, e.g. sepsis.  
 XX  
 PS Claim 6; SEQ ID NO 1209; 49pp; English.  
 XX  
 CC The invention relates to novel genes and encoded proteins from  
 CC Staphylococcus aureus. A composition comprising the S. aureus protein, a  
 CC nucleic acid encoding the protein, or an antibody to the protein, is  
 CC useful as a pharmaceutical, particularly as a vaccine for treating or  
 CC preventing infection due to Staphylococcus bacteria, specifically an  
 CC infection caused by S. aureus. The composition is particularly useful for  
 CC treating or preventing sepsis in a patient. The composition can also be  
 CC used for diagnostics. The protein is also used in an assay for enzymatic  
 CC studies and as a target for antibiotics. This sequence represents one of  
 CC the novel S. aureus genes of the invention  
 XX  
 SQ Sequence 267 BP; 108 A; 31 C; 52 G; 76 T; 0 U; 0 Other;





PT infections comprises identifying a nucleic acid encoding a product that  
 XX inhibits bacteria when a bacteriophage infects a bacterium.  
 PS Disclosure/ Page 190-198; 456pp; English.  
 XX  
 CC The present invention describes a method for identifying a bacteriophage  
 CC coding region encoding a product active on an essential bacterial target.  
 CC The method comprises identifying a nucleic acid sequence encoding a gene  
 CC product that provides a bacteria-inhibiting function when an  
 CC uncharacterized bacteriophage infects a pathogenic bacterium. The  
 CC compound active on a target of a bacteriophage inhibitor protein in a  
 CC bacteria is used to treat or prevent a bacterial infection in an animal.  
 CC AA66243 to AA69442 and AA816323 to AA816934 represent bacteriophage  
 CC nucleotide and protein sequences which are used in the exemplification of  
 CC the present invention. (Updated on 06-AUG-2003 to correct 05 field.)  
 CC (Updated on 15-SEP-2003 to standardise 05 field)  
 XX  
 SQ Sequence 43576 BP; 16057 A; 6485 C; 8769 G; 12265 T; 0 U; 0 Other;  
 XX  
 Query Match 10.7%; Score 28; DB 3; Length 43576;  
 Best Local Similarity 100.0%; Pred. No. 0.00035;  
 Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 234 ACTAATTAAGTACTGATGAAATGGTAG 261  
 DB 5235 ACTAATTAAGTACTGATGAAATGGTAG 5262  
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 RESULT 8  
 ACF73076  
 ID ACF73076 standard; DNA; 238 BP.  
 XX  
 AC ACF73076;  
 XX  
 DT 20-NOV-2003 (first entry)  
 XX  
 DE Staphylococcus aureus DNA #756.  
 XX  
 KW Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis;  
 XX enzymatic assay; antibiotic target; gene; ds.  
 XX  
 OS Staphylococcus aureus.  
 XX  
 PN W0200294868-A2.  
 XX  
 PD 28-NOV-2002.  
 XX  
 PF 27-MAR-2002; 2002WO-1B002637.  
 XX  
 PR 27-MAR-2001; 2001GB-00007661.  
 XX  
 PA (CHIR-) CHIRON SPA.  
 XX  
 PI Maignani V, Mora M, Scarselli M;  
 XX WPI; 2003-120786/11.  
 DR P-PsDB; ABM71516.  
 DR

XX  
 PT New Staphylococcus aureus protein, useful as a vaccine for treating or  
 PT preventing Staphylococcal infection, specifically an infection caused by  
 PT S. aureus, e.g. sepsis.  
 XX  
 PS Claim 6; SEQ ID NO 1511; 49pp; English.  
 XX  
 CC The invention relates to novel genes and encoded proteins from  
 CC Staphylococcus aureus. A composition comprising the S. aureus protein, a  
 CC nucleic acid encoding the protein, or an antibody to the protein, is  
 CC useful as a pharmaceutical, particularly as a vaccine for treating or  
 CC preventing infection due to Staphylococcus bacteria, specifically an  
 CC infection caused by S. aureus. The composition is particularly useful for  
 CC treating or preventing sepsis in a patient. The composition can also be  
 CC used for diagnostics. The protein is also used in an assay for enzymatic  
 CC studies and as a target for antibiotics. This sequence represents one of  
 CC the novel S. aureus genes of the invention  
 XX  
 SQ Sequence 258 BP; 103 A; 31 C; 51 G; 73 T; 0 U; 0 Other;  
 XX  
 Query Match 9.6%; Score 25; DB 7; Length 258;  
 Best Local Similarity 100.0%; Pred. No. 0.014;  
 Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 234 ACTAATTAAGTACTGATGAAATGG 258  
 DB 234 ACTAATTAAGTACTGATGAAATGG 258  
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 Search completed: October 15, 2004, 00:16:29  
 Job time : 212.116 secs

OM nucleic - nucleic search, using mw model

Run on: October 14, 2004, 22:42:59 ; Search time 1219.86 Seconds  
(without alignments)  
6389.277 Million cell updates/sec

SUMMARIES

28: gb\_gss1:.\*  
29: gb\_gss2:.\*  
Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

Title: US-09-407-804A-6  
Perfect score: 261  
Sequence: 1 atgtatctcgaatgagcga.....actagtcataatgtag 261  
Scoring table: OLI90\_NUC  
Gapop 60.0 , Gapext 60.0  
Searched: 27513289 seqs, 14931090276 residues  
Word size : 0  
Total number of hits satisfying chosen parameters: 55026578  
Minimum DB seq length: 0  
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Post-processing: Listing first 1000 summaries  
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9: gb\_oecl:.\*  
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4	19	7.3	121	9	A1951540
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6	19	7.3	522	29	CG428882
7	19	7.3	540	29	BX183031
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13	19	7.3	686	28	A0484284
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24	18	6.9	320	9	AA872489
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27	18	6.9	354	9	AA282587
28	18	6.9	360	28	A0265943
29	18	6.9	390	28	B37409
30	18	6.9	405	29	CE641065
31	18	6.9	408	9	AA088591
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33	18	6.9	412	9	AA255702
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41	18	6.9	458	9	AA047153
42	18	6.9	461	12	BJ046548
43	18	6.9	462	13	BY573081
44	18	6.9	463	29	CG985891
45	18	6.9	468	14	T89328

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c	47	18	6.9	494	12	B046014	B046014	B046014	c	104	18	6.9	720	29	CG500WG	AL093910	ArbIdcdps
c	48	18	6.9	495	13	BX872646	BX872646	BX872646	c	105	18	6.9	723	28	B2458710	B2458710	ArbIdcdps
c	49	18	6.9	508	28	AQ375859	AQ375859	RPCT11-14	c	106	18	6.9	725	9	A1290974	A1290974	GM15C08.x
c	50	18	6.9	509	9	AM021842	AM021842	dft29a06.y	c	107	18	6.9	748	12	B1087876	B1087876	602852679
c	51	18	6.9	510	12	B1963093	B1963093	1a66206.y	c	108	18	6.9	760	14	CA312676	CA312676	UT-CF-FNO
c	52	18	6.9	511	9	AA801416	AA801416	EST190913	c	109	18	6.9	779	10	BES39851	BES39851	601061965
c	53	18	6.9	511	9	AA146650	AA146650	z043d12.r	c	110	18	6.9	780	28	B2085908	B2085908	11h3b01.
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c	57	18	6.9	532	14	CB718807	CB718807	AMGNMNC.N	c	114	18	6.9	804	13	BE620191	BE620191	UT-H-FIL-
c	58	18	6.9	532	29	CE201002	CE201002	tlgr-9ss-	c	115	18	6.9	811	10	BE614108	BE614108	60118315
c	59	18	6.9	533	28	AZ553820	AZ553820	RPCT-23-1	c	116	18	6.9	824	9	AU118315	AU118315	60118315
c	60	18	6.9	533	28	BZ518982	BZ518982	BOMF216TR	c	117	18	6.9	830	12	B2784002	B2784002	SEALMCO03
c	61	18	6.9	546	13	B0395921	B0395921	603802505	c	118	18	6.9	833	28	AZ702636	AZ702636	RPCT-23-2
c	62	18	6.9	547	10	BF549762	BF549762	UI-R-A0-a	c	119	18	6.9	838	28	BH660714	BH660714	BOMF12TR
c	63	18	6.9	563	9	AV590721	AV590721	AV590721	c	120	18	6.9	841	13	B0116745	B0116745	601139747
c	64	18	6.9	563	12	BM190058	BM190058	POSM01000	c	121	18	6.9	843	29	CG825123	CG825123	SOYAC94TV
c	65	18	6.9	564	28	BH008399	BH008399	eL35c01.x	c	122	18	6.9	846	14	CA987036	CA987036	AGENCOUTR
c	66	18	6.9	573	12	B1444760	B1444760	daa93a07.	c	123	18	6.9	847	10	BF694081	BF694081	602082686
c	67	18	6.9	575	29	CE495919	CE495919	tlgr-9ss-	c	124	18	6.9	855	13	BK467886	BK467886	602441871
c	68	18	6.9	578	14	CA386811	CA386811	668508 NC	c	125	18	6.9	872	12	BG399577	BG399577	602441871
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c	70	18	6.9	588	14	CA650925	CA650925	wrcn.pk1	c	127	18	6.9	900	29	CC509879	CC509879	CH240_353
c	71	18	6.9	590	9	AL704631	AL704631	DKF26680	c	128	18	6.9	910	13	B0201973	B0201973	603951810
c	72	18	6.9	592	9	AA818734	AA818734	UI-R-A0-a	c	129	18	6.9	920	14	CF108627	CF108627	Shu1tzm1
c	73	18	6.9	598	12	B0970383	B0970383	UI-CF-ECL	c	130	18	6.9	937	13	B0481226	B0481226	60466859
c	74	18	6.9	602	13	B0702339	B0702339	1m11b01.x	c	131	18	6.9	964	10	BF209546	BF209546	601872730
c	75	18	6.9	606	9	AA149491	AA149491	z12Bb05.r	c	132	18	6.9	998	28	B2466016	B2466016	BONK64TF
c	76	18	6.9	606	14	CA375660	CA375660	653788 NC	c	133	18	6.9	1149	28	CC274388	CC274388	CH261-112
c	77	18	6.9	609	14	CD931537	CD931537	GR45.114M	c	134	18	6.9	1183	10	BE875365	BE875365	601487003
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c	79	18	6.9	632	12	B1492771	B1492771	dft29a06.w	c	136	18	6.9	178	14	CB870415	CB870415	601487003
c	80	18	6.9	645	29	CE511088	CE511088	tlgr-9ss-	c	137	18	6.9	190	14	CB485548	CB485548	601487003
c	81	18	6.9	648	12	B091083	B091083	B091083	c	138	18	6.9	212	10	BF228723	BF228723	SMVJ3CAN
c	82	18	6.9	650	14	CA780127	CA780127	MP1384.4	c	139	18	6.9	227	13	B0357041	B0357041	PFTSTob52
c	83	18	6.9	653	28	AZ638156	AZ638156	1m0497120	c	140	18	6.9	227	13	B0357041	B0357041	601487003
c	84	18	6.9	656	29	CC068104	CC068104	FULM44TD	c	141	18	6.9	229	12	EM027341	EM027341	G1T000068
c	85	18	6.9	657	13	B0433855	B0433855	603258238	c	142	18	6.9	233	28	AZ782938	AZ782938	2M0024P12
c	86	18	6.9	667	10	BE535553	BE535553	601060265	c	143	18	6.9	243	9	AU059887	AU059887	601060265
c	87	18	6.9	672	14	CA310990	CA310990	UI-CF-FNO	c	144	18	6.9	245	9	AL715175	AL715175	601060265
c	88	18	6.9	677	13	B0477501	B0477501	1k87g12.x	c	145	18	6.9	247	9	AA121205	AA121205	znb0b10.f
c	89	18	6.9	681	12	BM491033	BM491033	p9p2n.pk0	c	146	18	6.9	260	13	BQ757813	BQ757813	EBem10.SQ
c	90	18	6.9	682	28	BH425060	BH425060	BONH031TR	c	147	18	6.9	263	14	CD141160	CD141160	MGI-0069T
c	91	18	6.9	682	29	CE721090	CE721090	tlgr-9ss-	c	148	18	6.9	282	10	BF803200	BF803200	CNO-CI013
c	92	18	6.9	685	14	CD931536	CD931536	GR45.114M	c	149	18	6.9	287	12	B1703410	B1703410	601060265
c	93	18	6.9	688	14	CA367832	CA367832	643832 NC	c	150	18	6.9	298	9	AV339528	AV339528	601060265
c	94	18	6.9	688	14	CA775922	CA775922	1p01g11.x	c	151	18	6.9	299	14	CD063005	CD063005	601060265
c	95	18	6.9	698	28	AZ702634	AZ702634	RPCT-23-2	c	152	18	6.9	301	9	AV428985	AV428985	601060265
c	96	18	6.9	699	14	CB466979	CB466979	732893 MA	c	153	18	6.9	305	12	B1703411	B1703411	601060265
c	97	18	6.9	705	14	CF795789	CF795789	891982 MA	c	154	18	6.9	314	14	CF002778	CF002778	QBI1506.f
c	98	18	6.9	706	13	BK488598	BK488598	DKF2P686L	c	155	18	6.9	321	14	CD159773	CD159773	601060265
c	99	18	6.9	708	12	BG809404	BG809404	mghe0032x	c	156	18	6.9	325	12	BG354250	BG354250	601060265
c	100	18	6.9	710	13	BU677557	BU677557	UI-CF-ECL	c	157	18	6.9	338	12	B1350479	B1350479	601060265
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c	102	18	6.9	715	29	CE217017	CE217017	tlgr-9ss-	c	159	18	6.9	345	10	AW481192	AW481192	34786 MAR

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c 163	17	6.5	352	18	B0518498	EST629Y13		c 220	17	6.5	476	14	CD151313	CD151313	ML1-0032741
c 164	17	6.5	359	29	CE018865	tlgr-gs-a		c 221	17	6.5	479	28	A2165551	A2165551	SP_0082_B
c 165	17	6.5	360	13	C47083	CA47083 Yuj1		c 222	17	6.5	485	29	CE629783	CE629783	tlgr-gs-5
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c 170	17	6.5	364	28	A2702724	RPc1-23-2		c 227	17	6.5	495	12	BH737776	BH737776	K-E5T0000
c 171	17	6.5	365	12	B0380121	UI-R-C50-		c 228	17	6.5	496	12	B4761905	B4761905	R-6611905
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c 173	17	6.5	382	12	B1863990	ft16d01.x		c 230	17	6.5	500	9	AU086596	AU086596	AA086596
c 174	17	6.5	386	13	BU882152	UM73TC09		c 231	17	6.5	501	12	B1462291	B1462291	PUMD54TBH
c 175	17	6.5	388	12	B1992287	1020059B0		c 232	17	6.5	503	29	CG161066	CG161066	nab61B09.
c 176	17	6.5	394	13	BX492477	DKZ2P781E		c 233	17	6.5	504	10	BF439218	BF439218	HS_5114_B
c 177	17	6.5	395	13	B1615376	B1615376		c 234	17	6.5	510	28	AQ440696	AQ440696	HS_5114_B
c 178	17	6.5	399	9	AV653367	AV653367		c 235	17	6.5	516	10	B8640566	B8640566	B8640566
c 179	17	6.5	399	9	AV653455	AV653455		c 236	17	6.5	516	10	B8640566	B8640566	B8640566
c 180	17	6.5	403	13	BY510745	BY510745		c 237	17	6.5	516	10	B8640566	B8640566	B8640566
c 181	17	6.5	403	14	CB768715	CB768715		c 238	17	6.5	516	10	B8640566	B8640566	B8640566
c 182	17	6.5	405	14	CD066383	CD066383		c 239	17	6.5	516	28	BH820400	BH820400	BACP14-D-
c 183	17	6.5	407	9	AA332691	EST16754		c 240	17	6.5	518	9	A1732799	A1732799	ab2t.e11..x
c 184	17	6.5	408	10	B8237268	B8237268		c 241	17	6.5	518	10	AM505521	AM505521	UI-HF-BNO
c 185	17	6.5	410	28	AQ363028	nbdb0053B		c 242	17	6.5	518	12	BH955057	BH955057	PLATE_15
c 186	17	6.5	411	9	AV810147	AV810147		c 243	17	6.5	519	14	CA360520	CA360520	633907_NC
c 187	17	6.5	414	13	BY623508	BY623508		c 244	17	6.5	519	13	CA000637	CA000637	US07B03_
c 188	17														

c 273	17	6.5	553	28	AQ410320	AQ410320 HS_5111_A	330	17	6.5	605	28	AZ459386	AZ459386 1M0264L11
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275	17	6.5	558	12	B1936043	B1936043 PFEStGa2	332	17	6.5	607	12	B1267928	B1267928 NF114H121
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c 278	17	6.5	563	9	AU024507	AU024507 AU024507	c 335	17	6.5	611	12	EM072582	EM072582 fV08N05.Y
c 279	17	6.5	563	10	BE123231	BE123231 945039E01	c 336	17	6.5	611	28	AZ418660	AZ418660 1M0194014
c 280	17	6.5	563	28	AQ923373	AQ923373 RPECI-23-2	c 337	17	6.5	612	13	BK621393	BK621393 BX621393
c 281	17	6.5	563	28	BZ735903	BZ735903 621_4L_G1	c 338	17	6.5	615	28	BZ423878	BZ423878 1D54405.g
c 282	17	6.5	564	12	BK525530	BK525530 fK64B05.Y	c 339	17	6.5	618	28	AZ247021	AZ247021 RPECI-23-9
c 283	17	6.5	565	28	AQ720634	AQ720634 HS_5546_B	c 340	17	6.5	619	12	B1126743	B1126743 BE605965
c 284	17	6.5	566	29	CE095411	CE095411 t1gr-gss-	c 341	17	6.5	620	10	BE605965	BE605965 f124603.x
c 285	17	6.5	566	12	BK275708	BK275708 PFEStGa5	c 342	17	6.5	622	12	B0513713	B0513713 B0513713
c 286	17	6.5	569	13	BK737918	BK737918 BX737918	c 343	17	6.5	623	14	CB521333	CB521333 UI-M-GHO-
c 287	17	6.5	569	28	BZ679198	BZ679198 PUBB249TD	c 344	17	6.5	625	10	BF670958	BF670958 602150759
c 288	17	6.5	570	12	BK274525	BK274525 PFEStGa4	c 345	17	6.5	625	28	BH082279	BH082279 RPECI-24-3
c 289	17	6.5	571	12	B1841775	B1841775 f102B09.Y	c 346	17	6.5	626	10	BB650336	BB650336 BB650326
c 290	17	6.5	571	29	CE758952	CE758952 t1gr-gss-	c 347	17	6.5	626	28	BZ106398	BZ106398 CH230-204
c 291	17	6.5	572	12	BH879432	BH879432 Kt95a09.Y	c 348	17	6.5	628	12	B1475402	B1475402 fQ32B05.Y
c 292	17	6.5	574	12	BK454486	BK454486 BUK54486	c 349	17	6.5	628	12	EM079729	EM079729 MESt98-G0
c 293	17	6.5	574	14	CF892995	CF892995 A0117E04-	c 350	17	6.5	628	28	AZ418043	AZ418043 UI-M-EXO-
c 294	17	6.5	575	13	BQ141374	BQ141374 NF01BH07P	c 351	17	6.5	629	14	CB249003	CB249003 UI-M-EXO-
c 295	17	6.5	576	13	BQ074286	BQ074286 f227a08.Y	c 352	17	6.5	631	28	AZ641567	AZ641567 1M0504K07
c 296	17	6.5	577	12	B1325517	B1325517 f339C02.X	c 353	17	6.5	632	12	BE413502	BE413502 MCO010.BO
c 297	17	6.5	577	12	B1533342	B1533342 f339C02.X	c 354	17	6.5	632	10	BH172610	BH172610 1M0994G-C
c 298	17	6.5	578	12	BK275410	BK275410 PFEStGa6	c 355	17	6.5	632	28	BH830418	BH830418 BACP31-B
c 299	17	6.5	578	29	CE096477	CE096477 t1gr-gss-	c 356	17	6.5	634	14	CB429663	CB429663 605496 NA
c 300	17	6.5	580	12	BH160962	BH160962 EST563485	c 357	17	6.5	635	28	AZ290863	AZ290863 RPECI-23-1
c 301	17	6.5	581	12	BG226353	BG226353 Kq20612.Y	c 358	17	6.5	636	12	BM958079	BM958079 fY3309.X
c 302	17	6.5	582	12	B1311979	B1311979 EST531372	c 359	17	6.5	636	14	CF746138	CF746138 UI-M-GVO-
c 303	17	6.5	582	29	LABF046A01	LABF046A01 Le1ahmrd	c 360	17	6.5	636	29	CE707246	CE707246 t1gr-gss-
c 304	17	6.5	583	12	BK448769	BK448769 BUK448769	c 361	17	6.5	637	29	CG037889	CG037889 PUFMD06TB
c 305	17	6.5	583	13	BK627326	BK627326 BX627326	c 362	17	6.5	638	10	AM970281	AM970281 EST382362
c 306	17	6.5	586	12	B1429187	B1429187 f374B03.Y	c 363	17	6.5	638	14	CF743537	CF743537 UI-M-GIO-
c 307	17	6.5	587	12	B1982650	B1982650 f356C10.Y	c 364	17	6.5	640	13	CA056903	CA056903 s661rpb52
c 308	17	6.5	587	28	AZ846858	AZ846858 2M0147A14	c 365	17	6.5	640	14	CB521158	CB521158 UI-M-GHO-
c 309	17	6.5	588	12	BH959194	BH959194 PLATE.17	c 366	17	6.5	640	28	BH025055	BH025055 RPECI-24-2
c 310	17	6.5	588	14	CB353383	CB353383 2F001-P00	c 367	17	6.5	641	28	BZ627272	BZ627272 1H51409.b
c 311	17	6.5	588	14	CB519287	CB519287 UI-M-GHO-	c 368	17	6.5	642	12	BG873872	BG873872 MESt43-F0
c 312	17	6.5	590	10	AM281818	AM281818 f357d10.X	c 369	17	6.5	643	14	CF532744	CF532744 UI-M-GHO-
c 313	17	6.5	590	13	BQ180297	BQ180297 UI-M-EXO-	c 370	17	6.5	644	13	BK510120	BK510120 DKF268BD
c 314	17	6.5	592	12	B1429029	B1429029 f371e03.Y	c 371	17	6.5	644	14	CF745029	CF745029 UI-M-GVO-
c 315	17	6.5	597	28	CC939970	CC939970 PUBF143TD	c 372	17	6.5	646	14	CB723748	CB723748 UI-M-FY0-
c 316	17	6.5	598	12	BK497547	BK497547 BUK497547	c 373	17	6.5	647	9	AU253519	AU253519 AU253519
c 317	17	6.5	598	13	BQ723941	BQ723941 AGENCCURT	c 374	17	6.5	652	13	CA160894	CA160894 SCACR2306
c 318	17	6.5	599	10	AM967905	AM967905 EST379980	c 375	17	6.5	655	29	AG148030	AG148030 Pan treq1
c 319	17	6.5	600	12	BG802981	BG802981 0193-45 M	c 376	17	6.5	656	28	AZ369500	AZ369500 1M0120D10
c 320	17	6.5	600	13	BU919815	BU919815 6041-11 M	c 377	17	6.5	657	12	B1509403	B1509403 B0509403
c 321	17	6.5	602	9	AL699109	AL699109 DKF2686B	c 378	17	6.5	657	13	BQ480954	BQ480954 f6a72406.
c 322	17	6.5	602	9	AL719598	AL719598 AL719598	c 379	17	6.5	663	13	B0715011	B0715011 SUNBSP01
c 323	17	6.5	602	12	B0103294	B0103294 BUK03294	c 380	17	6.5	663	14	CB519872	CB519872 UI-M-GHO-
c 324	17	6.5	602	13	BK082315	BK082315 BX082315	c 381	17	6.5	665	13	BY741953	BY741953 BUK41953
c 325	17	6.5	602	13	CA025081	CA025081 HZ51C14f	c 382	17	6.5	666	14	CF540041	CF540041 UI-M-EXO-
c 326	17	6.5	602	29	CE203989	CE203989 t1gr-gss-	c 383	17	6.5	667	10	BB521610	BB521610 BB521610
c 327	17	6.5	603	10	AM970362	AM970362 EST382443	c 384	17	6.5	667	28	AZ245826	AZ245826 RPECI-23-4
c 328	17	6.5	604	13	BQ075080	BQ075080 f227a08.X	c 385	17	6.5	669	12	B1261287	B1261287 602969018
c 329	17	6.5	604	14	CF622008	CF622008 lat11908.	c 386	17	6.5	669	28	BH959056	BH959056 odj08d04.

387	17	6.5	670	14	CD348458	CD348458	UI-M-FY0-
388	17	6.5	670	28	A2093842	A2093842	RPCT-23-4
389	17	6.5	671	14	CF744025	CF744025	UI-M-GV0-
390	17	6.5	672	29	CG820908	CG820908	SOYAU89TV
391	17	6.5	673	13	BK305022	BK305022	EX305022
392	17	6.5	675	28	A2468744	A2468744	1M0281J17
393	17	6.5	676	9	AV653243	AV653243	AV653243
394	17	6.5	676	29	CG052463	CG052463	PUMP42TD
395	17	6.5	678	14	CB214436	CB214436	OML04716
396	17	6.5	682	28	CC324799	CC324799	TAM32-10C
397	17	6.5	683	28	BH824542	BH824542	BACP20-N
398	17	6.5	689	14	CB519117	CB519117	UI-M-GH0-
399	17	6.5	689	14	CB248922	CB248922	UI-M-EX0-
400	17	6.5	690	14	CB249531	CB249531	UI-M-EX0-
401	17	6.5	690	14	CB447711	CB447711	701732 MA
402	17	6.5	694	14	CB525130	CB525130	UI-M-FY0-
403	17	6.5	695	14	CB249774	CB249774	UI-M-EX0-
404	17	6.5	695	29	CC711044	CC711044	OG08D34TV
405	17	6.5	696	28	B2423864	B2423864	1d54C02.9
406	17	6.5	698	14	CM233312	CM233312	AGENCOURT
407	17	6.5	699	13	BU722530	BU722530	SCMAJC03
408	17	6.5	700	12	BP115175	BP115175	BP115175
409	17	6.5	700	14	CD578408	CD578408	UI-M-FY0-
410	17	6.5	701	13	BK673897	BK673897	RPCT-24-2
411	17	6.5	701	28	BH054777	BH054777	RPCT-24-2
412	17	6.5	702	14	CA388914	CA388914	663680 NC
413	17	6.5	702	28	CC072258	CC072258	CSU-K33r.
414	17	6.5	704	29	CG924814	CG924814	MBEKB5TF
415	17	6.5	707	10	BE965957	BE965957	601659850
416	17	6.5	707	14	CB528208	CB528208	UI-M-FY0-
417	17	6.5	708	10	BF362333	BF362333	PNO-NN004
418	17	6.5	708	12	BJ508392	BJ508392	BU508392
419	17	6.5	708	13	BQ442269	BQ442269	UI-M-EX0-
420	17	6.5	709	14	CF728091	CF728091	UI-M-GH0-
421	17	6.5	709	14	CF534097	CF534097	UI-M-EX0-
422	17	6.5	710	13	BO180624	BO180624	UI-M-EX0-
423	17	6.5	711	12	BJ021333	BJ021333	BJ021333
424	17	6.5	711	13	BK077221	BK077221	EX077221
425	17	6.5	712	10	BG069039	BG069039	H3072A10-
426	17	6.5	712	29	CC790062	CC790062	ZMMBB015
427	17	6.5	712	29	CG693958	CG693958	ZMMBB029
428	17	6.5	713	12	BJ540962	BJ540962	BJ540962
429	17	6.5	713	14	CA325246	CA325246	UI-M-FY0-
430	17	6.5	713	14	CF182447	CF182447	UI-M-FY0-
431	17	6.5	713	29	CC338908	CC338908	UI-M-FY0-
432	17	6.5	714	14	CF534147	CF534147	UI-M-GH0-
433	17	6.5	717	13	BQ546146	BQ546146	EST629773
434	17	6.5	717	14	CB249979	CB249979	UI-M-EX0-
435	17	6.5	717	14	CB526633	CB526633	UI-M-FY0-
436	17	6.5	717	28	A2381379	A2381379	1M0137K24
437	17	6.5	720	12	BJ539515	BJ539515	665776 NC
438	17	6.5	722	14	CA384982	CA384982	UI-M-EX0-
439	17	6.5	723	14	CB248828	CB248828	UI-M-EX0-
440	17	6.5	723	14	CB289996	CB289996	UI-M-FY0-
441	17	6.5	723	29	CF761977	CF761977	UI-M-FY0-
442	17	6.5	724	14	CB429306	CB429306	603113 MA
443	17	6.5	726	14	CA919348	CA919348	EST637066
444	17	6.5	726	14	CF536851	CF536851	UI-M-FY0-
445	17	6.5	726	28	BH007589	BH007589	ee71c03.x
446	17	6.5	727	12	BG618564	BG618564	602645477
447	17	6.5	728	14	CD348418	CD348418	UI-M-FY0-
448	17	6.5	729	11	CNS0803G	CNS0803G	Single fe
449	17	6.5	730	13	BU378789	BU378789	604171355
450	17	6.5	730	28	AQ291302	AQ291302	nbdb0038D
451	17	6.5	731	29	CC504377	CC504377	1d12h04.g
452	17	6.5	732	12	BH943819	BH943819	603362590
453	17	6.5	733	12	CC505082	CC505082	UI-M-FY0-
454	17	6.5	735	12	BI738892	BI738892	603362590
455	17	6.5	735	12	BI738892	BI738892	603362590
456	17	6.5	736	29	AG081460	AG081460	UI-M-EX0-
457	17	6.5	736	29	AG081460	AG081460	UI-M-EX0-
458	17	6.5	738	14	CB520841	CB520841	UI-M-EX0-
459	17	6.5	741	13	BQ180496	BQ180496	UI-M-EX0-
460	17	6.5	741	13	CA139810	CA139810	SC2ZRT201
461	17	6.5	742	14	CB519090	CB519090	UI-M-GH0-
462	17	6.5	743	13	BK081851	BK081851	UI-M-GH0-
463	17	6.5	743	14	CA752208	CA752208	UI-M-FY0-
464	17	6.5	744	13	CF182743	CF182743	UI-M-FY0-
465	17	6.5	747	14	CC128652	CC128652	NDI-4C13
466	17	6.5	748	28	CC247469	CC247469	CH261-13E
467	17	6.5	752	14	CB521168	CB521168	UI-M-GH0-
468	17	6.5	753	14	CA318569	CA318569	UI-M-FY0-
469	17	6.5	754	12	BM167220	BM167220	ES7569743
470	17	6.5	754	14	CB519577	CB519577	UI-M-GH0-
471	17	6.5	755	14	CF532371	CF532371	UI-M-GH0-
472	17	6.5	755	14	EX082316	EX082316	EX082316
473	17	6.5	758	13	BK081852	BK081852	EX081852
474	17	6.5	760	28	BZ709997	BZ709997	OGDA0037M
475	17	6.5	761	13	BK082712	BK082712	EX082712
476	17	6.5	762	12	BM963405	BM963405	UI-M-E00-
477	17	6.5	763	12	BJ533156	BJ533156	BJ533156
478	17	6.5	763	14	CK027696	CK027696	AGNOCOURT
479	17	6.5	764	29	CG761621	CG761621	ZMMBB033
480	17	6.5	764	29	CG888560	CG888560	ZMMBB036
481	17	6.5	765	13	BU611625	BU611625	UI-M-FY0-
482	17	6.5	766	29	CG952252	CG952252	MBEJY72TR
483	17	6.5	774	14	CF535686	CF535686	UI-M-GH0-
484	17	6.5	775	29	CG904137	CG904137	UI-M-GH0-
485	17	6.5	777	14	CF182530	CF182530	ZMMBB051
486	17	6.5	782	29	CNS01KVM	CNS01KVM	UI-M-EY0-
487	17	6.5	784	13	BK083167	BK083167	Antophelias
488	17	6.5	785	12	BI851873	BI851873	603378030
489	17	6.5	785	13	BK073840	BK073840	UI-M-FY0-
490	17	6.5	785	13	BU238786	BU238786	603322479
491	17	6.5	796	14	CF550433	CF550433	AGNOCOURT
492	17	6.5	801	28	BH065923	BH065923	RPCT-24-2
493	17	6.5	807	13	BK077222	BK077222	CG1X06422
494	17	6.5	808	14	CA969404	CA969404	CH240.419
495	17	6.5	809	29	CC539302	CC539302	ZMMBB030
496	17	6.5	816	28	CC173934	CC173934	AGNOCOURT
497	17	6.5	818	14	CK027306	CK027306	UI-M-FY0-
498	17	6.5	823	12	BI852870	BI852870	603379161
499	17	6.5	831	28	BZ463862	BZ463862	BONR026TF
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501	17	6.5	831	28	B2604705	WHAB1207R	558	17	6.5	1299	29	CG750474	CG750474 P045-1-B0
502	17	6.5	832	13	BU958973	AGENCOURT	c 559	17	6.5	1315	29	CG749195	CG749195 P043-2-D0
503	17	6.5	832	14	CG652343	AGENCOURT	c 560	17	6.5	1320	29	CG755797	CG755797 P051-2-B0
504	17	6.5	837	13	BK078183	BK078183	c 561	17	6.5	1326	11	AY109265	AY109265 Zee maya
505	17	6.5	843	29	CG922445	MBEMF847F	562	17	6.5	1360	29	CG757149	CG757149
506	17	6.5	844	14	CF662055	CCXL13A40	563	17	6.5	1370	29	CG757666	CG757666 P053-1-B0
507	17	6.5	847	13	BK082517	BK082517	564	17	6.5	1385	29	CG757667	CG757667 P053-1-B0
508	17	6.5	847	29	CC538494	CH240_419	c 565	17	6.5	1812	28	B2572834	CG757667 P053-1-B0
509	17	6.5	861	13	BU918996	AGENCOURT	566	17	6.5	2914	11	AK044809	CG757667 P053-1-B0
510	17	6.5	861	28	A2197691	SP_1035_B	567	17	6.5	3404	11	AK044809	AK044809 Mus muscu
511	17	6.5	867	29	CNS04E1H	Tetraodon	568	17	6.5	4793	11	AK049003	AK049003 Mus muscu
512	17	6.5	868	14	CS514443	CS514443 ssa1irpb55	569	17	6.5	7886	11	BC034956	BC034956 Homo sapi
513	17	6.5	873	13	BQ229068	BQ229068 AGENCOURT	570	17	6.5	1113	10	AM493141	AM493141 UI-M-BH3-
514	17	6.5	875	13	BK083032	BK083032 BX083032	571	17	6.5	128	28	A2121241	A2121241 RPT1-23-1
515	17	6.5	877	13	BQ716790	AGENCOURT	c 572	17	6.5	131	12	BG125723	BG125723 EST471369
516	17	6.5	883	28	B2411388	CGABQ927C	573	17	6.5	139	9	AV331698	AV331698 AV331698
517	17	6.5	889	14	CS517722	ssa1irpb55	574	17	6.5	144	10	BB373750	BB373750 BB373750
518	17	6.5	896	13	BU908189	AGENCOURT	c 575	17	6.5	146	12	BM385843	BM385843 UI-R-DH1-
519	17	6.5	903	29	CG955735	MBEPM817F	c 576	17	6.5	148	12	BM166797	BM166797 C0337F11-
520	17	6.5	904	28	A2538065	A2538065 ENTEBD16TF	c 577	17	6.5	157	28	CG152863	CG152863 CSU-K34.1
521	17	6.5	904	28	B2176853	B2176853 CH230-443	c 578	17	6.5	158	10	BB278128	BB278128 BB278128
522	17	6.5	915	10	BF739615	BF739615 601556306	c 579	17	6.5	165	13	BY373743	BY373743 BY373743
523	17	6.5	921	10	BF689582	BF689582 602186967	c 580	17	6.5	166	13	BY461142	BY461142 BY461142
524	17	6.5	924	29	CNS04DEL	AL285654 Tetraodon	581	17	6.5	167	10	BB806644	BB806644 UI-M-AH1-
525	17	6.5	926	29	AG131045	Pan trogl	c 582	17	6.5	170	10	BB349050	BB349050 BB349050
526	17	6.5	932	10	BF794648	BF794648 602256038	c 583	17	6.5	174	12	BM974993	BM974993 UI-CF-EC1
527	17	6.5	938	10	BB896784	BB896784 601437467	584	17	6.5	177	9	A1795260	A1795260 RRACA961
528	17	6.5	944	28	BF104206	BF104206 601647042	c 585	17	6.5	190	10	BB569076	BB569076 BB569076
529	17	6.5	944	28	A2166857	A2166857 SP_0094_A	c 586	17	6.5	191	9	A1566420	A1566420 t99c09.x
530	17	6.5	945	29	CG187851	CG187851 PUFOT297B	c 587	17	6.5	194	14	H31987	H31987 EST106594.R
531	17	6.5	953	28	A2546793	A2546793 ENTEP357F	588	17	6.5	198	29	CE341223	CE341223 t19f-gss-
532	17	6.5	962	29	CG864763	CG864763 ZMMBEB027	589	17	6.5	199	10	BB526321	BB526321 BB526321
533	17	6.5	970	13	BQ948847	BQ948847 AGENCOURT	c 590	17	6.5	200	10	AMS22327	AMS22327 UI-R-B00-
534	17	6.5	985	29	CG215171	CG215171 OGB1D6TV	c 591	17	6.5	200	10	BB568419	BB568419 BB568419
535	17	6.5	1001	14	CA471037	CA471037 AGENCOURT	c 592	17	6.5	202	9	A1136936	A1136936 UI-R-C2P-
536	17	6.5	1015	13	BQ934321	BQ934321 AGENCOURT	c 593	17	6.5	204	28	A2990332	A2990332 ZM0274EB5
537	17	6.5	1019	28	CG282360	CG282360 CH261-90P	594	17	6.5	205	10	BF606142	BF606142 Z73101.MA
538	17	6.5	1024	29	CNS01579	CG282360 CH261-90P	595	17	6.5	208	12	BM842177	BM842177 K-EST0119
539	17	6.5	1028	28	CC304758	CC304758 CH261-9P1	596	17	6.5	209	14	CA752421	CA752421 UI-M-F00-
540	17	6.5	1029	28	CC224470	CC224470 CH261-153	c 597	17	6.5	213	12	BG382038	BG382038 297756.MA
541	17	6.5	1033	29	CG907498	CG907498 ZMMBEB052	598	17	6.5	213	28	B2662851	B2662851 SALK_0263
542	17	6.5	1033	29	CNS03DJ6	AL239163 Tetraodon	599	17	6.5	216	28	B2596216	B2596216 SALK_0922
543	17	6.5	1041	28	CC214449	CC214449 CH261-188	600	17	6.5	220	28	A2069871	A2069871 RPT1-23-4
544	17	6.5	1045	12	BG295556	BG295556 602292975	c 601	17	6.5	221	14	CD803193	CD803193 UI-M-GVO-
545	17	6.5	1094	28	CC273352	CC273352 CH261-205	c 602	17	6.5	223	14	F09079	F09079 HSC2WF092.n
546	17	6.5	1158	12	BG539949	BG539949 602567461	c 603	17	6.5	224	10	BB092003	BB092003 BB092003
547	17	6.5	1167	29	CG746243	CG746243 P039-2-G0	c 604	17	6.5	224	10	BB473846	BB473846 BB473846
548	17	6.5	1197	28	CC261180	CC261180 CH261-12F	c 605	17	6.5	227	9	A1561506	A1561506 w92a06.x
549	17	6.5	1201	14	CK028287	CK028287 AGENCOURT	c 606	17	6.5	227	10	AMS24661	AMS24661 UI-R-B00-
550	17	6.5	1204	29	CG750473	P045-1-B0	c 607	17	6.5	227	14	CD090629	CD090629 MCL-0076U
551	17	6.5	1212	12	BM548314	AGENCOURT	608	17	6.5	227	28	BH848543	BH848543 C6755871
552	17	6.5	1230	28	CC189151	CC189151 CH261-566	609	17	6.5	227	29	CE775871	CE775871 t19f-gss-
553	17	6.5	1234	12	B1686981	B1686981 60331863	610	17	6.5	229	10	BB150997	BB150997 BM244993
554	17	6.5	1253	29	CG748711	CG748711 P042-3-G0	c 611	17	6.5	229	12	BM284893	BM284893 BM244993
555	17	6.5	1254	12	BM467495	BM467495 AGENCOURT	c 612	17	6.5	230	13	BY373672	BY373672 BY373672
556	17	6.5	1266	29	CG743976	CG743976 P036-2-F0	c 613	17	6.5	230	14	CF539542	CF539542 UI-M-GVO-
557	17	6.5	1277	29	CG746704	CG746704 P040-1-B0	614	17	6.5	233	9	AV332643	AV332643 AV332643

615	16	6.1	235	10	BB276208	BB276208	BB276208	615	16	6.1	283	28	BH012313	BH012313	TDCAH827H
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617	16	6.1	236	9	AV322814	AV322814	AV322814	617	16	6.1	285	14	H88375	H88375	YJ21603.a1
618	16	6.1	237	9	AI232819	AI232819	AI232819	618	16	6.1	287	10	BB472147	BB472147	BB472147
619	16	6.1	237	9	AV336113	AV336113	AV336113	619	16	6.1	287	14	R75424	R75424	MB05092
620	16	6.1	237	29	CE792669	CE792669	CE792669	620	16	6.1	288	10	BB179748	BB179748	MB05092
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622	16	6.1	239	9	AV242121	AV242121	AV242121	622	16	6.1	288	10	BB179748	BB179748	MB05092
623	16	6.1	243	9	AU229087	AU229087	AU229087	623	16	6.1	289	10	AM910708	AM910708	BB181903
624	16	6.1	243	9	AA262595	AA262595	AA262595	624	16	6.1	289	10	BB071482	BB071482	BB071482
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626	16	6.1	246	28	BB48499	BB48499	BB48499	626	16	6.1	289	13	BB732670	BB732670	BB732670
627	16	6.1	247	9	AV244224	AV244224	AV244224	627	16	6.1	289	28	AA086513	AA086513	AA086513
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632	16	6.1	251	9	AA002435	AA002435	AA002435	632	16	6.1	290	28	AZ882146	AZ882146	BB21003.a1
633	16	6.1	253	9	AV221200	AV221200	AV221200	633	16	6.1	291	10	BB003244	BB003244	BB003244
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636	16	6.1	255	28	AA236346	AA236346	AA236346	636	16	6.1	291	10	BB469864	BB469864	BB469864
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638	16	6.1	255	13	BB633276	BB633276	BB633276	638	16	6.1	292	9	AV242674	AV242674	BB540456
639	16	6.1	256	13	BB384549	BB384549	BB384549	639	16	6.1	293	9	AA556095	AA556095	BB465886
640	16	6.1	261	12	BB601362	BB601362	BB601362	640	16	6.1	293	28	AA066482	AA066482	BB465886
641	16	6.1	262	28	BB680871	BB680871	BB680871	641	16	6.1	294	10	BB457600	BB457600	BB457600
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643	16	6.1	264	10	BBF198277	BBF198277	BBF198277	643	16	6.1	294	10	BB571738	BB571738	BB571738
644	16	6.1	265	29	CE103553	CE103553	CE103553	644	16	6.1	295	9	AV225010	AV225010	BB255010
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647	16	6.1	267	13	BB913747	BB913747	BB913747	647	16	6.1	297	12	BB938881	BB938881	BB938881
648	16	6.1	268	10	BB066539	BB066539	BB066539	648	16	6.1	297	28	CC158095	CC158095	BB061758
649	16	6.1	269	9	AI289932	AI289932	AI289932	649	16	6.1	299	10	BB061758	BB061758	BB061758
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651	16	6.1	270	29	CE603372	CE603372	CE603372	651	16	6.1	301	29	CG701034	CG701034	BB2092347
652	16	6.1	271	9	AJ005947	AJ005947	AJ005947	652	16	6.1	301	28	AA2092347	AA2092347	BB2092347
653	16	6.1	272	9	AI854774	AI854774	AI854774	653	16	6.1	303	13	C20970	C20970	BB2092347
654	16	6.1	274	28	AA2492312	AA2492312	AA2492312	654	16	6.1	303	28	BB233559	BB233559	BB233559
655	16	6.1	274	29	CE123258	CE123258	CE123258	655	16	6.1	304	10	BB493246	BB493246	BB493246
656	16	6.1	275	10	BB422254	BB422254	BB422254	656	16	6.1	305	10	BB101640	BB101640	BB101640
657	16	6.1	275	10	BB431551	BB431551	BB431551	657	16	6.1	305	29	CE388645	CE388645	BB101640
658	16	6.1	276	9	AV011865	AV011865	AV011865	658	16	6.1	308	9	AA268402	AA268402	BB268402
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660	16	6.1	276	12	BB161695	BB161695	BB161695	660	16	6.1	309	29	BB532606	BB532606	BB532606
661	16	6.1	276	13	BBY59776	BBY59776	BBY59776	661	16	6.1	310	10	BB522281	BB522281	BB522281
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665	16	6.1	279	29	CG427327	CG427327	CG427327	665	16	6.1	312	10	AAW42368	AAW42368	AAW42368
666	16	6.1	281	10	BB441508	BB441508	BB441508	666	16	6.1	312	10	BB520619	BB520619	BB520619
667	16	6.1	282	12	BBM999662	BBM999662	BBM999662	667	16	6.1	312	13	EX618380	EX618380	BBM999662
668	16	6.1	283	10	BB143340	BB143340	BB143340	668	16	6.1	312	13	EX618380	EX618380	BBM999662
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671	16	6.1	283	12	BB316370	BB316370	BB316370	671	16	6.1	313	10	AAW939834	AAW939834	BBM999662



729	16	6.1	314	28	A0515895	c 786	16	6.1	360	10	BE987780
730	16	6.1	315	9	AV101041	c 787	16	6.1	360	13	C39911
731	16	6.1	315	12	B1687854	c 788	16	6.1	360	13	C43346
732	16	6.1	316	10	BB449185	c 789	16	6.1	360	14	CD956378
733	16	6.1	317	13	C91101	c 790	16	6.1	360	14	CD966541
734	16	6.1	319	9	A1620600	c 791	16	6.1	360	29	CE092280
735	16	6.1	320	9	AV169380	c 792	16	6.1	361	10	AM703423
736	16	6.1	320	29	CE068270	c 793	16	6.1	361	14	CD951371
737	16	6.1	320	29	CE452881	c 794	16	6.1	362	12	BG630512
738	16	6.1	321	9	A1545247	c 795	16	6.1	362	28	BH397372
739	16	6.1	321	10	BB501838	c 796	16	6.1	363	9	AA827458
740	16	6.1	322	29	BB394532	c 797	16	6.1	363	10	BB813807
741	16	6.1	322	29	CE681502	c 798	16	6.1	363	9	AA603280
742	16	6.1	324	10	BB390796	c 799	16	6.1	363	28	BH826325
743	16	6.1	325	9	AV311754	c 800	16	6.1	366	12	BM979415
744	16	6.1	328	10	AA230071	c 801	16	6.1	366	29	CE276561
745	16	6.1	329	14	F07713	c 802	16	6.1	367	9	AA574198
746	16	6.1	329	28	AQ200799	c 803	16	6.1	367	10	BB805158
747	16	6.1	330	9	AA911124	c 804	16	6.1	367	10	BE098176
748	16	6.1	330	9	AI501178	c 805	16	6.1	367	12	BG625879
749	16	6.1	330	9	AL039771	c 806	16	6.1	367	13	BY020527
750	16	6.1	330	9	AV555698	c 807	16	6.1	368	9	AL644003
751	16	6.1	332	9	AA775636	c 808	16	6.1	369	13	BY019879
752	16	6.1	332	10	BB369273	c 809	16	6.1	369	29	CE138776
753	16	6.1	332	12	B1289163	c 810	16	6.1	369	29	CE473395
754	16	6.1	333	9	AT001772	c 811	16	6.1	370	9	AI085557
755	16	6.1	334	14	H33846	c 812	16	6.1	371	10	AM790444
756	16	6.1	335	10	BB678042	c 813	16	6.1	371	12	BG877563
757	16	6.1	337	9	A1422429	c 814	16	6.1	371	29	CE695680
758	16	6.1	337	28	B2919454	c 815	16	6.1	372	10	BF721900
759	16	6.1	338	9	AA877003	c 816	16	6.1	373	10	BB837033
760	16	6.1	338	10	BB099450	c 817	16	6.1	373	9	AI361983
761	16	6.1	339	28	BH810757	c 818	16	6.1	375	28	BH712714
762	16	6.1	340	9	A1234909	c 819	16	6.1	375	28	AQ377405
763	16	6.1	340	10	BB121349	c 820	16	6.1	377	9	AA989172
764	16	6.1	341	10	AA954653	c 821	16	6.1	377	10	AA95607
765	16	6.1	341	10	BG070139	c 822	16	6.1	377	10	BB800745
766	16	6.1	342	10	BB100294	c 823	16	6.1	378	13	BK726351
767	16	6.1	342	28	A2560216	c 824	16	6.1	379	13	BY482004
768	16	6.1	344	12	BG372664	c 825	16	6.1	379	29	CE619823
769	16	6.1	346	12	B1966004	c 826	16	6.1	379	29	CE635882
770	16	6.1	346	28	AQ028531	c 827	16	6.1	380	12	B1966171
771	16	6.1	346	28	AQ223380	c 828	16	6.1	380	12	B0316159
772	16	6.1	347	9	A1290680	c 829	16	6.1	380	14	Z43542
773	16	6.1	347	9	AV693524	c 830	16	6.1	381	10	BB793278
774	16	6.1	347	12	BG100453	c 831	16	6.1	381	28	AZ248227
775	16	6.1	347	12	B1294552	c 832	16	6.1	382	28	BH291646
776	16	6.1	350	10	BB843821	c 833	16	6.1	384	29	AG261312
777	16	6.1	350	10	BB843821	c 834	16	6.1	384	13	BT701363
778	16	6.1	354	9	AA250216	c 835	16	6.1	385	9	AI764253
779	16	6.1	354	10	BB258374	c 836	16	6.1	385	10	AM948637
780	16	6.1	354	28	A2892139	c 837	16	6.1	385	29	CG861219
781	16	6.1	354	28	BH445546	c 838	16	6.1	387	10	AM413754
782	16	6.1	356	10	BB241758	c 839	16	6.1	387	10	BB837489
783	16	6.1	356	12	BM940697	c 840	16	6.1	387	12	BM356370
784	16	6.1	358	28	BH860351	c 841	16	6.1	387	13	BY483341
785	16	6.1	359	28	B2761307	c 842	16	6.1	388	10	AM948571

843	c	843	16	6.1	388	14	CA488005	CA488005	AGENCOURT	900	16	6.1	412	10	BF389768	BF389768	UI-R-B52-
844	c	844	16	6.1	389	9	AA997771	AA997771	UI-R-EO-d	901	16	6.1	413	10	BB731719	BB731719	BB731719
845	c	845	16	6.1	389	9	A1298882	A1298882	qm9e410.x	902	16	6.1	414	10	AM206511	AM206511	UI-H-B11-
846	c	846	16	6.1	389	28	B30832	B30832	HS-1003-A2-	903	16	6.1	414	29	BK532605	BK532605	AR-Hiddops
847	c	847	16	6.1	390	10	AM524847	AM524847	UI-R-B00-	904	16	6.1	415	14	CA847219	CA847219	hac12806.
848	c	848	16	6.1	391	9	AA688081	AA688081	AK44g06.s	905	16	6.1	415	14	CP426321	CP426321	1ae42808.
849	c	849	16	6.1	391	9	AA900710	AA900710	UI-R-EO-b	906	16	6.1	415	28	AO356970	AO356970	HS_5308.B
850	c	850	16	6.1	392	10	AM948638	AM948638	QVO-F7000	907	16	6.1	415	28	AO585606	AO585606	RPCI-11-4
851	c	851	16	6.1	392	10	BE843399	BE843399	CMO-TN003	908	16	6.1	415	28	AO585606	AO585606	RPCI-11-4
852	c	852	16	6.1	392	14	CD972253	CD972253	QAE1c11.Y	909	16	6.1	417	29	CE645485	CE645485	tlgr-gsa-
853	c	853	16	6.1	393	9	A1501988	A1501988	UI-R-EO-d	910	16	6.1	417	29	CE762634	CE762634	tlgr-gsa-
854	c	854	16	6.1	393	9	AV591094	AV591094	AV591094	911	16	6.1	418	28	AO523588	AO523588	tlgr-gsa-
855	c	855	16	6.1	396	29	CC781529	CC781529	ZMMEB-043	912	16	6.1	420	12	BE660341	BE660341	mc90e01.x
856	c	856	16	6.1	398	10	BE172065	BE172065	MRO-HT055	913	16	6.1	421	9	A1413338	A1413338	mc90e01.x
857	c	857	16	6.1	398	29	CC737389	CC737389	ZMMEB-032	914	16	6.1	422	28	AO134340	AO134340	HS_3051.B
858	c	858	16	6.1	399	9	A1025142	A1025142	ou55h11.x	915	16	6.1	423	9	A1426310	A1426310	mg56f04.x
859	c	859	16	6.1	399	10	BB817975	BB817975	BB817975	916	16	6.1	423	12	BF390226	BF390226	UI-R-CN1-
860	c	860	16	6.1	399	13	BY701536	BY701536	BY701536	917	16	6.1	424	12	B2172299	B2172299	UI-R-CN1-
861	c	861	16	6.1	399	28	BH126595	BH126595	BANC-SatC	918	16	6.1	424	29	CE097104	CE097104	tlgr-gsa-
862	c	862	16	6.1	400	10	BE446709	BE446709	WHE1139.C	919	16	6.1	425	10	BE203681	BE203681	EST396357
863	c	863	16	6.1	401	10	AM430671	AM430671	70539.MAR	920	16	6.1	425	14	CB411058	CB411058	3529.1.51
864	c	864	16	6.1	401	10	BB682808	BB682808	BB682808	921	16	6.1	425	14	CD465307	CD465307	Leu6koh1.3
865	c	865	16	6.1	401	13	BY632469	BY632469	BY632469	922	16	6.1	425	29	CE302622	CE302622	tlgr-gsa-
866	c	866	16	6.1	401	29	CE540332	CE540332	tlgr-gsa-	923	16	6.1	426	9	A1413407	A1413407	md0b10.x
867	c	867	16	6.1	401	29	AL755941	AL755941	Arb1dops	924	16	6.1	426	10	BB677625	BB677625	BB677625
868	c	868	16	6.1	402	29	CC911129	CC911129	ZMMEB-036	925	16	6.1	426	28	CC054809	CC054809	BB810028
869	c	869	16	6.1	403	13	BK094465	BK094465	BK094465	926	16	6.1	427	9	A1348628	A1348628	q035a10.x
870	c	870	16	6.1	403	13	BK512748	BK512748	BK512748	927	16	6.1	427	10	BB733371	BB733371	BB733371
871	c	871	16	6.1	403	28	AQ716761	AQ716761	HS_5463.A	928	16	6.1	428	13	BY447966	BY447966	BY447966
872	c	872	16	6.1	404	10	AM311704	AM311704	5526.MAR	929	16	6.1	428	13	BZ594076	BZ594076	SAUK_0827
873	c	873	16	6.1	404	10	BB797863	BB797863	BB797863	930	16	6.1	429	9	AA648705	AA648705	EST191465
874	c	874	16	6.1	404	14	CB242048	CB242048	UI-CF-FNO	931	16	6.1	429	10	BB810028	BB810028	BB810028
875	c	875	16	6.1	405	10	AM656054	AM656054	108086.MA	932	16	6.1	429	13	BK487362	BK487362	DKF2P864
876	c	876	16	6.1	405	10	AM656055	AM656055	108087.MA	933	16	6.1	429	13	BY538049	BY538049	BY538049
877	c	877	16	6.1	405	28	AQ338491	AQ338491	HS_3118.B	934	16	6.1	429	14	H96813	H96813	Y*98M04.s1
878	c	878	16	6.1	406	9	A1498641	A1498641	tm47b04.x	935	16	6.1	429	29	FP014103U	FP014103U	Parametlu
879	c	879	16	6.1	406	10	BF588969	BF588969	7148h03.x	936	16	6.1	430	9	AA879273	AA879273	rm86c01.s
880	c	880	16	6.1	406	28	AQ338532	AQ338532	HS_3118.B	937	16	6.1	430	10	AM707156	AM707156	sk10d09.y
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882	c	882	16	6.1	407	9	AV590736	AV590736	AV590736	939	16	6.1	430	14	CA536585	CA536585	CO236C06-
883	c	883	16	6.1	407	10	BF771028	BF771028	IL5-IT002	940	16	6.1	431	14	CA536585	CA536585	CO236C06-
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885	c	885	16	6.1	408	10	BF754330	BF754330	IL5-CF051	942	16	6.1	432	9	A1359112	A1359112	qy20f10.x
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887	c	887	16	6.1	408	28	AQ144134	AQ144134	HS_3074.A	944	16	6.1	432	10	BE945834	BE945834	UI-M-B20-
888	c	888	16	6.1	408	28	AQ610255	AQ610255	HS_5094.A	945	16	6.1	432	12	BI293356	BI293356	UI-R-DK0-
889	c	889	16	6.1	409	9	AV590062	AV590062	AV590062	946	16	6.1	432	28	AZ443104	AZ443104	1M0237E08
890	c	890	16	6.1	409	10	BB829007	BB829007	SEALMC009	947	16	6.1	433	10	BF958320	BF958320	CMZ-NN024
891	c	891	16	6.1	409	12	BB829007	BB829007	SEALMC009	948	16	6.1	434	9	A1033959	A1033959	ox09g03.x
892	c	892	16	6.1	409	28	BE160744	BE160744	CH250-376	949	16	6.1	434	28	BB332429	BB332429	CH230-125
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894	c	894	16	6.1	410	10	AM948636	AM948636	QVO-F7000	951	16	6.1	435	9	AM057697	AM057697	mc90b10.x
895	c	895	16	6.1	410	12	BG554898	BG554898	dac3cf02.	952	16	6.1	435	10	BB823948	BB823948	BB823948
896	c	896	16	6.1	411	10	AM650803	AM650803	EST329257	953	16	6.1	435	10	BE097149	BE097149	BB835600
897	c	897	16	6.1	411	10	BB733419	BB733419	BB733419	954	16	6.1	435	10	CE564116	CE564116	tlgr-gsa-
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899	c	899	16	6.1	411	28	BH338096	BH338096	CH230-89D	956	16	6.1	436	28	AO197385	AO197385	CIT-HSP-2

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c 972	16	6.1	441	10	BB732340	BB732340	BB732340
c 973	16	6.1	442	12	B1185862	B1185862	UNL-P-FN-
c 974	16	6.1	442	12	BJ209857	BJ209857	BJ209857
c 975	16	6.1	442	14	R94319	R94319	yq41e08.r1
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c 982	16	6.1	445	14	CA321131	CA321131	UI-M-FW0-
c 983	16	6.1	446	9	A1818030	A1818030	WR41e04.x
c 984	16	6.1	446	10	AW853416	AW853416	RC1-CT025
c 985	16	6.1	446	10	BE417602	BE417602	MUG022.G0
c 986	16	6.1	446	13	BY572097	BY572097	BY572097
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c 990	16	6.1	448	29	CG029636	CG029636	CHGAC67TF
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c 996	16	6.1	451	13	BQ370547	BQ370547	CM1-GN028
c 997	16	6.1	451	13	BQ560915	BQ560915	H4067C05-
c 998	16	6.1	452	9	A1401684	A1401684	th24e03.x
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Search completed: October 15, 2004, 06:26:08  
Job time : 1285.86 secs

OM nucleole - nucleole search, using SW model

Run on: October 14, 2004, 09:12:14 ; Search time 3665.14 Seconds  
(without alignments)

8443.595 Million cell updates/sec

Title: US-09-407-804A-4

Perfect score: 714  
Sequence: 1 atgacgcatactatagaaaa.....agatccctgataaagtga 714

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 3470272 seqs, 2167151695 residues

Total number of hits satisfying chosen parameters: 6940544

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

GenEmbl: +  
1: gb\_ba: +  
2: gb\_hgt: +  
3: gb\_in: +  
4: gb\_ov: +  
5: gb\_ov: +  
6: gb\_pat: +  
7: gb\_ph: +  
8: gb\_pl: +  
9: gb\_pr: +  
10: gb\_re: +  
11: gb\_scs: +  
12: gb\_sy: +  
13: gb\_un: +  
14: gb\_vl: +  
15: em\_da: +  
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23: em\_pat: +  
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25: em\_pl: +  
26: em\_ro: +  
27: em\_scs: +

28: em\_un: +  
29: em\_vl: +  
30: em\_hgt\_hum: +  
31: em\_hgt\_inv: +  
32: em\_hgt\_other: +  
33: em\_hgt\_mus: +  
34: em\_hgt\_pin: +  
35: em\_hgt\_rnd: +  
36: em\_hgt\_mam: +  
37: em\_hgt\_vrt: +  
38: em\_sy: +  
39: em\_hgtc\_hum: +  
40: em\_hgtc\_mus: +  
41: em\_hgtc\_other: +

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query				DB ID	Description
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1	714	100.0	714	6	BD245275	BD245275 Developte
2	714	100.0	41708	6	BD245281	BD245281 Developte
3	714	100.0	41708	6	AR368770	AR368770 Sequence
4	109.8	15.4	170627	2	AC125567	AC125567 Rattus no
5	107.8	15.1	175544	2	AC117342	AC117342 Rattus no
6	94	13.2	161398	9	AC092804	AC092804 Homo sapi
7	93	13.0	195620	2	BX088600	BX088600 Danto rer
8	92.6	13.0	104992	2	AC005504	AC005504 Plasmodiu
9	92.6	13.0	169546	2	AC004157	AC004157 Plasmodiu
10	92.6	13.0	250421	2	AE014849	AE014849 Plasmodiu
11	92.2	12.9	99003	2	AL390756	AL390756 Homo sapi
12	91.4	12.8	89665	9	AC063976	AC063976 Homo sapi
13	91.4	12.8	163660	2	AC046165	AC046165 Homo sapi
14	91.4	12.8	218083	2	AC142177	AC142177 Rattus no
15	90.8	12.7	2452	3	AF337815	AF337815 Dictyoste
16	90.4	12.7	349980	6	AX344555	AX344555 Sequence
17	90.2	12.6	131682	9	AL672277	AL672277 Human DNA
18	90.2	12.6	152651	2	BX322643	BX322643 Danto rer
19	90	12.6	250713	3	AE014850	AE014850 Plasmodiu
20	89.8	12.6	246611	2	AC111404	AC111404 Rattus no
21	89.4	12.5	250743	3	AE014836	AE014836 Plasmodiu
22	89.2	12.5	157141	3	AC016445	AC016445 Drosophi
23	89	12.5	1219	3	AF513853	AF513853 Epiritta
24	89	12.5	250029	9	AE014820	AE014820 Plasmodiu
25	88.8	12.4	159618	9	AC096730	AC096730 Homo sapi
26	88.8	12.4	169122	9	AC106803	AC106803 Homo sapi
27	88.8	12.4	254050	3	PF929338	PF929338 Plasmodiu
28	88.4	12.4	313050	3	PF929332	PF929332 Plasmodiu
29	88.2	12.4	250029	3	AE014839	AE014839 Plasmodiu
30	88	12.3	192265	9	CNS01893	AL110118 Human chr
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	37	87.2	12.2	4.7601	3	AFM07802	AC073802 Homo sapi
	38	87.2	12.2	6.6442	3	AFM01174	AL031747 Plasmodi
	39	87.2	12.2	1.95620	2	AX088600	BX088600 Dariole
c	40	87	12.2	3.683	6	AX558939	Seq1
	41	86.6	12.1	9.0550	9	AL153216	Human DNA
	42	86.6	12.1	1.56723	3	AL010638	AL153216 Drosophil
	43	86.6	12.1	3.12724	4	AC019846	AC010638 Drosophil
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	45	86.4	12.1	2.50823	3	AE014821	AE0116925 Plasmodi

## ALIGNMENTS

RESULT 1	LOCUS	DEFINITION	ACCESSION	VERSION	KEYWORDS	SOURCE	ORGANISM	REFERENCE	AUTHORS	TITLE	JOURNAL
BD245275	714 bp	Development of novel antibiotics based on bacteriophage genomics.	BD245275	1	GI:33055045	JP 2002531107-A/10.	unidentified unidentified unclassified.	1 (bases 1 to 714)	Pelletier, J., Gros, P. and Dubow, M.	Development of novel antibiotics based on bacteriophage genomics	Patent: JP 2002531107-A 10 24-SEP-2002;

COMMENT	source	FEATURES
OS Staphylococcus aureus bacteriophage 77		
PN JP 2002531107-A/10		
PD 24-SEP-2002		
PF 03-DEC-1999 JP 2000583456		
PR 03-DEC-1998 US 60/110992,03-JUN-1999 US 09/326144 PR		
28-SEP-1999 US 09/407804,30-SEP-1999 US 60/157218 PR		
01-DEC-1999 US 60/168777,02-DEC-1999 US 09/454252 PT		JERRA
PELLLETIER, PHILLIPE GROS, MICHAEL, DUBOW		
PC C12N15/09, A61N63/00, A61K45/00, A61P31/04, C07K14/005, PC		
PC C12M1/00,		
PC C12N1/21, C12Q1/02, C12Q1/68, G01N33/15, G01N33/50, G01N33/566, PC		
C12N15/00,		
PC A61K37/02		
CC Coding Sequence		
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FT		/organism="Staphylococcus
aureus bacteriophage 77",		
Location/Qualifiers		
1..714		
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QY	361	CAAAATATTCAGCATATTAAAGAAAGTTTCGATFMAAAATTCGAAAAAACACACA	420
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QY	541	AAATTAAGATTAAGTATAGTACGCTTGCATTAATCTTTCCAGCCGATTAAGTATTCGC	600
Db	23442	AAATTAAGATTAAGTATAGTACGCTTGCATTAATCTTTCCAGCCGATTAAGTATTCGC	23382
QY	601	ATAAGAAAGTTTATACCCGAAAAATTAATAATTCAGATTAATAGATCTTCGATATTAG	660
Db	23382	ATAAGAAAGTTTATACCCGAAAAATTAATAATTCAGATTAATAGATCTTCGATATTAG	23322
QY	661	TTACTGATTAATAGATTATTAATATATATTGCAATCCCTGATTAATAGATGA	714
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AR368770/c			
LOCUS	AR368770	41708 bp	DNA
DEFINITION	Sequence 3 from patent US 637652.		linear
ACCESSION	AR368770		
VERSION	AR368770.1	GI:34603077	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unknown.		
REFERENCE	1 (bases 1 to 41708)		
AUTHORS	Pelletier,J., Gros,P. and Dubow,M.		
TITLE	Compositions and methods involving an essential <i>Staphylococcus aureus</i> gene and its encoded protein		
JOURNAL	Patent: US 637652-A 3 23-Apr-2002;		
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	/mol_type="genomic DNA"		
ORIGIN			
Query Match	100.0%;	Score 714;	DB 6; Length 41708;
Best Local Similarity	100.0%;	Pred No. 1,2e-82;	

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QY	61	AAAAAGTTAGATTCAAGTATTCGATATTACTCAAGATTGAAGTGAACAT	120
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QY	181	GTTATTAAGAAATTTCTATTTCACTTTCGAAATAGTGAATAAAATGATCTAT	240
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QY	241	ACGAGAGATATAGTAAATGTTATTCCTTATCTCTAAAGAAAACAAAAGTATTTAAAG	300
Db	23742	ACGAGAGATATAGTAAATGTTATTCCTTATCTCTAAAGAAAACAAAAGTATTTAAAG	23683
QY	301	ATGAATTTGATTTGAAATGGGAGATATTATTAAGATGTTTTAAATTTAATTAGCGG	360
Db	23682	ATGAATTTGATTTGAAATGGGAGATATTATTAAGATGTTTTAAATTTAATTAGCGG	23623
QY	361	CAAAATATTCAGCTATTTAAAGAAAGTTTCGATAAAAAATACAAAACACACACA	420
Db	23622	CAAAATATTCAGCTATTTAAAGAAAGTTTCGATAAAAAATACAAAACACACACA	23563
QY	421	GAATTCATCACTAAAGATTTATTTATGAAATTTAAATCTGAATGTTGAATTTGAAAT	480
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QY	601	ATAAGAAAGTTTATCCGCAAAAATTTAAAAATCCAGTAATAGATCTCTCGGATATTAG	660
Db	23382	ATAAGAAAGTTTATCCGCAAAAATTTAAAAATCCAGTAATAGATCTCTCGGATATTAG	23323
QY	661	TTACTGATTAATAGATTAATTAATATATTGGAGATCCGTGATTAAGTGA	714
Db	23322	TTACTGATTAATAGATTAATTAATATATTGGAGATCCGTGATTAAGTGA	23269

Search completed: October 14, 2004, 16:00:19  
Job time : 3672.14 secs

GenCore version 5.1.6  
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OM nucleic - nucleic search, using sw model

Run on: October 14, 2004, 07:30:59 ; Search time 476 Seconds

(without alignments)  
6372.297 Million cell updates/sec

Title: US-09-407-804A-4

Sequence: 1 atgacgcataatatagaaaa...agatccctgatataagatga 714

Scoring table: IDENTITY\_NUC

Searched: 3373863 bqs, 2124099041 residues

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : N\_Geneseq\_29Jan04:4

N\_Geneseq\_29Jan04:

- 1: geneseqn1980s: \*
- 2: geneseqn1990s: \*
- 3: geneseqn2000s: \*
- 4: geneseqn2001as: \*
- 5: geneseqn2001bs: \*
- 6: geneseqn2002s: \*
- 7: geneseqn2003as: \*
- 8: geneseqn2003bs: \*
- 9: geneseqn2003cs: \*
- 10: geneseqn2004s: \*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	714	100.0	714	3	AA66248	Aa66248 Bacteriophage
c 2	714	100.0	41708	3	AA66247	Aa66247 Bacteriophage
c 3	714	100.0	41708	4	AA68106	Aa68106 Complexe
4	87.6	12.3	8056	7	AB210246	AB210246 Haematopys
5	87.6	12.3	8056	7	AB210100	AB210100 Haematopys
c 6	87.4	12.2	883	4	AA115210	AA115210 Human birc
c 7	87	12.2	3653	7	AB210199	AB210199 Haematopys

8	86.2	12.1	700	4	AAH93026	AAH93026 Human inf
9	84.8	11.9	15674	6	ABJ32263	Abj32263 Human imm
10	84.8	11.9	15674	6	ABJ34477	Abj34477 Human met
11	84.8	11.9	15674	6	ABJ70514	Abj70514 Chemocall
12	83.8	11.7	6375	6	ABJ34025	Abj34025 Human imm
13	83.8	11.7	38342	4	AA546746	AA546746 Tumour su
14	83.8	11.7	38342	6	ABK31507	Abk31507 Signal tr
15	83	11.6	61020	4	AA546788	AA546788 Tumour su
16	81	11.3	6292	4	AA546735	AA546735 Tumour su
17	80.6	11.3	9741	6	ABJ33323	Abj33323 Human imm
18	80.4	11.3	6409	4	AA546496	AA546496 Tumour su
19	80	11.2	17538	6	ABJ33157	Abj33157 Human imm
20	79.6	11.1	7351	6	ABJ32028	Abj32028 Human imm
21	79	11.1	3683	7	ABZ10053	Abz10053 Haematopo
22	78.8	11.0	18154	6	ABJ32254	Abj32254 Human imm
23	78.4	11.0	18218	6	ABJ33949	Abj33949 Human imm
24	78.2	11.0	83391	6	ABQ67093	Abq67093 Human ang
25	77.8	10.9	8056	7	ABZ10246	Abz10246 Haematopo
26	77.8	10.8	2501	9	ADB54244	ADB54244 Pretreate
27	77	10.8	5689	4	AA545384	AA545384 Chemocall
28	77	10.8	5689	4	AA546426	AA546426 Tumour su
29	77	10.8	5689	4	ABK28226	Abk28226 DNA trans
30	77	10.8	8056	7	ABZ10100	Abz10100. Haematopo
31	76.8	10.8	9539	4	AA545346	AA545346 Chemocall
32	76.8	10.8	9539	6	ABK28179	Abk28179 DNA trans
33	76.6	10.7	6668	6	ABJ33697	Abj33697 Human imm
34	76.2	10.7	5962	6	ABJ33286	Abj33286 Human imm
35	76	10.6	6644	2	AAK33181	AAK33181 Base sequ
36	76	10.6	7372	2	AAK33182	AAK33182 Base sequ
37	76	10.6	7797	2	AAK33180	AAK33180 Compox vl
38	76	10.6	7996	6	AAJ33184	AAJ33184 Human imm
39	76	10.6	14006	6	ABJ33958	Abj33958 Human imm
40	75.8	10.6	6856	6	ABJ70225	Abj70225 Chemocall
41	75.6	10.6	6898	6	ABH80222	Abh80222 Human che
42	75.6	10.6	13511	6	ABJ32281	Abj32281 Human imm
43	75.4	10.6	2501	9	ADB54116	ADB54116 Pretreate
44	75.4	10.6	6095	4	AA546310	AA546310 Tumour su
45	75.4	10.6	6095	6	ABJ32361	Abj32361 Human imm

# ALIGNMENTS

**RESULT 1**  
**AAA68248**  
**ID** **AAA68248** standard; DNA; 714 BP.  
**XX**  
**AC** **AAA68248**;  
**XX**  
**DT** **15-SEP-2003** (revised)  
**DT** **06-AUG-2003** (revised)  
**DT** **27-OCT-2000** (first entry)  
**XX**  
**DE** **Bacteriophage 77 77ORF017** nucleotide sequence.  
**XX**  
**XX** **Bacteriophage; antimicrobial; genome; identification; antibacterial;**  
**KW** **bacterial growth inhibition; bacterial infection; ds.**

XX	Staphylococcus aureus; bacteriophage 77.
OS	WO200032825-A2.
XX	
PN	08-JUN-2000.
XX	
PD	03-DEC-1999; 99WO-IB002040.
XX	
PF	03-DEC-1999; 98US-0110992P.
XX	
PR	03-JUN-1999; 99US-00326144.
XX	
PR	28-SEP-1999; 99US-00407804.
XX	
PR	30-SEP-1999; 99US-0137218P.
XX	
PR	01-DEC-1999; 99US-0168777E.
XX	
PR	02-DEC-1999; 99US-00454252.
XX	
PA	(PHAG-) PHAGEGEN INC.
XX	
PI	Pelletier J, Gros P, Dubow M,
XX	
DR	WPI; 2000-412361/35.
XX	
DR	P-PSDB; AAB16523.
XX	
PT	Identifying a bacteriophage coding region for treating bacterial
XX	
PT	infections comprises identifying a nucleic acid encoding a product that
XX	
PS	inhibits bacteria when a bacteriophage infects a bacterium.
XX	
PS	Disclosure; Page 153; 456pp; English.
XX	
CC	The present invention describes a method for identifying a bacteriophage
XX	
CC	coding region encoding a product active on an essential bacterial target.
XX	
CC	The method comprises identifying a nucleic acid sequence encoding a gene
XX	
CC	product that provides a bacteria-inhibiting function when an
XX	
CC	uncharacterised bacteriophage infects a pathogenic bacterium. The
XX	
CC	compound active on a target of a bacteriophage inhibitor protein in a
XX	
CC	bacteria is used to treat or prevent a bacterial infection in an animal.
XX	
CC	AA68243 to AA69442 and AAB16523 to AAB16954 represent bacteriophage
XX	
CC	nucleotide and protein sequences which are used in the exemplification of
XX	
CC	the present invention. (Updated on 06-AUG-2003 to correct OS field.)
XX	
CC	(Updated on 15-SEP-2003 to standardise OS field)
XX	
SQ	Sequence 714 BP; 312 A; 77 C; 96 G; 229 T; 0 U; 0 Other;
XX	
Query Match	100.0%; Score 714; DB 3; Length 714;
Best Local Similarity	100.0%; Pred. No. 7.8e-101;
Matches 714; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
OY	1 ATGAGCATATATATGAAAAAGCATTAATTAATAAACTCGAATAATTCATAATT 60
DB	1 ATGAGCATATATATGAAAAAGCATTAATTAATAAACTCGAATAATTCATAATT 60
OY	61 AAAAGTTAGTTCAGATATTCATATTATTCAGAGATTGAAGTGAAAAAATCAT 120
DB	61 AAAAGTTAGTTCAGATATTCATATTATTCAGAGATTGAAGTGAAAAAATCAT 120
OY	121 AAAGTTTATCCAAAGTTTAAACAAGAGAAATTAAGTTTGTAGATTGCGTAAAC 180



PD	06-JUN-2000.
PF	03-DEC-1999; 99WO-IB002040.
PR	03-DEC-1998; 98US-0110992P.
PR	03-JUN-1999; 99US-00326144.
PR	28-SEP-1999; 99US-0040780A.
PR	30-SEP-1999; 99US-0157218P.
PR	01-DEC-1999; 99US-0168777P.
PR	02-DEC-1999; 99US-0045425Z.
PA	(PHAG-) PHAGETECH INC.
PI	Pelletier J, Gros P, Dubow M;
DR	WPI; 2000-412361/35.
PT	Identifying a bacteriophage coding region for treating bacterial
PT	infections comprises identifying a nucleic acid encoding a product that
PS	inhibits bacteria when a bacteriophage infects a bacterium.
PS	Example 3; Page 141-151; 456pp; English.
CC	The present invention describes a method for identifying a bacteriophage
CC	coding region encoding a product active on an essential bacterial target.
CC	The method comprises identifying a nucleic acid sequence encoding a gene
CC	product that provides a bacteria-inhibiting function when an
CC	uncharacterised bacteriophage infects a pathogenic bacterium. The
CC	compound active on a target of a bacteriophage inhibitor protein in a
CC	bacteria is used to treat or prevent a bacterial infection in an animal.
CC	AA668243 to AA699442 and AB16523 to AB16954 represent bacteriophage
CC	nucleotide and protein sequences which are used in the exemplification of
CC	the present invention. (updated on 06-AUG-2003 to correct OS field.)
CC	(Updated on 15-SEP-2003 to standardise OS field)
XQ	Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 U; 0 Other;
BQ	Query Match 100.0%; Score 714; DB 3; Length 41708;
BQ	Best Local Similarity 100.0%; Pred. No. 5.8e-101;
Matches	714; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
DQ	1 ATGACGATATATAGAAAAAGCATTTAATAATTAAAACCTCTGGAAATCCAAATTT 60 
DQ	23982 ATGACGCAATATATAGAAAAGCATTAAATTAATTAATAACTCTGGAATCCAAATTT 23922 
OY	61 AAAAGTGAATCGAATATTCCTATTACTCAAGAATTGAAGTGAAAAAACAT 120 
DQ	23922 AAAAGTGAATCGAATATTCCTATTACTCAAGAATTGAAGTGAAAAAACAT 23863 
OY	121 AAAGTTTTATCCAAAGTTAAACAAGAGAAATGTTTTGTAAATTCGGGTAAAC 180 
DQ	23862 AAAGTTTTATCCAAAGTTAAACAAGAGAAATGTTTTGTAAATTCGGGTAAAC 23803 
OY	181 GTTAATAAAGAAATTTCTATTACACTTTGCATAGTAGTAATTAATTAAGATCTAAT 240 
DQ	23802 GTTAATTAAGAAATTTCTATTACACTTTGCATAGTAGTAATTAATTAAGATCTAAT 23744 

QY 241 ACGAGATATAGTAATGTATTCCTTACCTTAAGAAAAAGATTTAAAG 300  
DB 23742 ACGAGATATAGTAATGTATTCCTTACCTTAAGAAAAAGATTTAAAG 23683  
QY 301 ATGATTTGATTGAAATGGAGATTATTAGATTGTTTTTAATTATTAACGCG 360  
DB 23682 ATGATTTGATTGAAATGGAGATTATTAGATTGTTTTTAATTATTAACGCG 23623  
QY 361 CAAATATATTCAGCTATATTAAGAGTTTCGATTAAGAAAAATACCAACACA 420  
DB 23622 CAAATATATTCAGCTATATTAAGAGTTTCGATTAAGAAAAATACCAACACA 23563  
QY 421 GATTCATCATTAAGATTATTTATGAAATTTATATCTGATAGTTTGAATTAAT 480  
DB 23562 GATTCATCATTAAGATTATTTATGAAATTTATATCTGATAGTTTGAATTAAT 23503  
QY 481 AATTAATTAATTAATGACGAAACATTAATACATAGATCAGCAATGATAAGTAA 540  
DB 23502 AATTAATTAATTAATGACGAAACATTAATACATAGATCAGCAATGATAAGTAA 23443  
QY 541 AATTAATTAATTAATGATTAACCTTGCATTAATTTCTCCAGCCGATTAAGTTTCC 600  
DB 23442 AATTAATTAATTAATGATTAACCTTGCATTAATTTCTCCAGCCGATTAAGTTTCC 23383  
QY 601 ATAAAGAAAGTTTACCCCAAAAAATTAATAATCCAGTAATATCTTCGATATATG 660  
DB 23382 ATAAAGAAAGTTTACCCCAAAAAATTAATAATCCAGTAATATCTTCGATATATG 23323  
QY 661 TTACTGATTAATAGATTATTAATATATATTCGATATCTTCGATATATAGTA 714  
DB 23322 TTACTGATTAATAGATTATTAATATATATTCGATATCTTCGATATATAGTA 23269

RESULT 3  
AAC86106/c  
ID AAC86106 standard; cDNA; 41708 BP.  
XX  
AC AAC86106;  
XX  
XX 06-AUG-2003 (revised)  
DT 29-AUG-2001 (first entry)  
XX  
DE Complete genome of bacteriophage 77.  
XX  
KW DnaI; S. aureus; inhibitor; bacteriophage 77; ORF 104; phage 77ORF104;  
RW screening assay; ss.  
XX  
XX Bacteriophage.  
OS  
XX  
XX W0200146383-A2.  
PN  
XX 28-JUN-2001.  
PD  
XX 21-DEC-2000; 2000WC-US035180.  
PF  
XX 22-DEC-1999; 99US-00470512.

PR 12-OCT-2000; 2000US-00689952.  
XX  
XX (PHAG-) PHAGE TECH INC.  
PA (WILL/) WILLIAMS K M.  
XX  
XX Pelletier J, Gros P, Dubow M;  
PI  
DR WPI; 2001-418052/44.  
XX  
XX Novel DnaI polypeptides useful for treating and diagnosing microbial,  
PT preferably bacterial, diseases such as those caused by Staphylococcus  
PT aureus.  
XX  
XX Disclosure; Fig 2; 107pp; English.  
XX  
XX This sequence represents the genome of Bacteriophage 77. The growth  
CC inhibitory gene product of ORF 104 interacts with DnaI derived from S.  
CC aureus, to form the basis of a screening assay. DnaI polypeptides and  
CC polynucleotides are useful for treating microbial, preferably bacterial,  
CC especially Staphylococcal, infections. DnaI polypeptides and  
CC polynucleotides are useful for biological, diagnostic, prophylactic,  
CC clinical and therapeutic use, and as components in databases useful for  
CC search analyses as well as in sequence analysis algorithms. (Updated on  
XX 06-AUG-2003 to correct OS field.)  
SQ  
Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 U; 0 Other;  
Query Match 100.0%; Score 714; DB 4; Length 41708;  
Best local similarity 100.0%; Pred. No. 5, 8e-101;  
Matches 714; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ATAGCCATTAATATAGAAAAAGCATTATTAATTAATAAACTTCGAAATCCAAAATTT 60  
DB 23982 ATAGCCATTAATATAGAAAAAGCATTATTAATTAATAAACTTCGAAATCCAAAATTT 23923  
QY 61 AAAAGTTAGTTCAGATATTCATCTTACTCAAGAGTTTGAAGTGAAGAAAAACAT 120  
DB 23922 AAAAGTTAGTTCAGATATTCATCTTACTCAAGAGTTTGAAGTGAAGAAAAACAT 23863  
QY 121 AAAGTTTTATCCAAAGTTTAAACAAGAAATAGTTTTGTAGTTTCGGTATTAAC 180  
DB 23862 AAAGTTTTATCCAAAGTTTAAACAAGAAATAGTTTTGTAGTTTCGGTATTAAC 23803  
QY 181 GTTAATTAAGATTTCTAATTCACACTTGCATATAGTATGAATTAATAATGATCTAAT 240  
DB 23802 GTTAATTAAGATTTCTAATTCACACTTGCATATAGTATGAATTAATAATGATCTAAT 23743  
QY 241 ACGAGATATAGTAATGTATTCCTTACCTTAAGAAAAAGATTTAAAG 300  
DB 23742 ACGAGATATAGTAATGTATTCCTTACCTTAAAGAAAAAGATTTAAAG 23683  
QY 301 ATGATTTGATTGAAATGGAGATTATTAGATTGTTTTTAATTATTAACGCG 360  
DB 23682 ATGATTTGATTGAAATGGAGATTATTAGATTGTTTTTAATTATTAACGCG 23623  
QY 361 CAAATATATTCAGCTATATTAAGAGTTTCGATTAAGAAAAATACCAACACA 420



28: gb\_ges1:\*

29: gb\_ges2:\*

Prod. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	113.6	15.9	1200	13	BK437758	BK437758 BK437758
2	110	15.4	1200	13	BK415878	BK415878 BK415878
3	105	14.7	1101	29	CNS00EVL	AL069706 Drosophila
4	102.2	14.3	1348	29	CG749499	CG749499 P043-4-A0
5	102	14.3	1391	29	CG754863	CG754863 P050-2-G0
6	101.6	14.2	1201	13	BK335216	BK335216 BK335216
7	101.2	14.2	778	29	AG058583	AG058583 Pan trogl
8	100.6	14.1	1201	13	BK420717	BK420717 BK420717
9	100.2	14.0	1626	14	CF238805	CF238805 AGENCOURT
10	100	14.0	1896	29	CG753083	CG753083 P048-1-C0
11	99.6	13.9	1123	14	CD325190	CD325190 AGENCOURT
12	97.6	13.7	1200	13	BK436510	BK436510 BK436510
13	97	13.6	1201	9	AL536104	AL536104 AL536104
14	96.6	13.5	1178	28	BZ696021	BZ696021 SP_Ba007
15	96	13.4	1201	9	AL565455	AL565455 AL565455
16	95.8	13.4	1045	13	BK456814	BK456814 BK456814
17	94.4	13.2	879	29	CNS01JRG	AL147405 Anopheles
18	94.2	13.2	1101	29	CNS0021J	AL061936 Drosophila
19	94	13.2	1201	29	CNS0167M	AL106396 Drosophila
20	93.6	13.1	998	13	BK436885	BK436885 BK436885
21	93.6	13.1	1201	13	BK439779	BK439779 BK439779
22	93.4	13.1	1101	29	CNS0039G	AL063921 Drosophila
23	93.2	13.1	964	13	BK341256	BK341256 BK341256
24	93	13.0	1164	28	CC218891	CC218891 CH261-14M
25	92.6	13.0	1092	29	CNS020K7	AL175696 Tetradon
26	92.6	13.0	1202	28	CC262481	CC262481 CH261-167
27	92.4	12.9	1101	29	CNS00EPO	AL069493 Drosophila
28	92	12.9	781	29	CNS009DO	AL053444 Drosophila
29	92	12.9	1074	28	BZ696936	BZ696936 SP_Ba009
30	91.8	12.9	1175	28	BZ696936	BZ696936 SP_Ba008
31	91.8	12.9	1200	13	BK415878	BK415878 BK415878
32	91.8	12.9	1392	29	CG757503	CG757503 P052-4-C0
33	91.6	12.8	910	12	BK415636	BK415636 OP2071.4 M
34	91.4	12.8	935	28	BI0881	BI0881 F24H6-Sp6.1
35	91.4	12.8	994	29	CNS04NOJ	AL298972 Tetradon
36	91.2	12.8	990	29	CNS00601	AL065624 Drosophila
37	91	12.7	1056	13	BK415058	BK415058 BK415058
38	91	12.7	1190	29	CNS020N7	AL206908 Tetradon
39	91	12.7	1350	29	CG744271	CG744271 P036-4-C0
40	90.8	12.7	1101	29	CNS00E07	AL069440 Drosophila
41	90.6	12.7	1029	29	CNS01ZG4	AL174271 Tetradon
42	90.6	12.7	1169	29	CNS06KHQ	AL402900 T3 end of
43	90.4	12.7	1201	9	AL536104	AL536104 AL536104
44	89.8	12.6	1101	29	CNS00EVL	AL069706 Drosophila
45	89.8	12.6	1193	29	CG745316	CG745316 P038-1-G0

Search completed: October 14, 2004, 18:55:05  
Job time : 339.86 secs

OM nucleic - nucleic search, using sw model

Run on: October 14, 2004, 19:00:14 ; Search time 3665.45 Seconds

(without alignments)  
8442.862 Million cell updates/sec

Title: US-09-407-804A-4

Perfect score: 714

Sequence: 1 atgacgcatacatatagaataa.....agatccctcgtatagaatga 714

Scoring table: OLIGO\_NUC

Gapop 60.0 , Gapext 60.0

Searched: 3470272 seqs, 21671516995 residues

Word size : 0

Total number of hits satisfying chosen parameters: 6940544

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database :

GenEmbl:.\*  
1: gb\_ba:.\*  
2: gb\_hvg:.\*  
3: gb\_in:.\*  
4: gb\_ov:.\*  
5: gb\_ov:.\*  
6: gb\_pat:.\*  
7: gb\_ph:.\*  
8: gb\_pl:.\*  
9: gb\_pr:.\*  
10: gb\_ro:.\*  
11: gb\_str:.\*  
12: gb\_sy:.\*  
13: gb\_un:.\*  
14: gb\_vl:.\*  
15: em\_ba:.\*  
16: em\_fun:.\*  
17: em\_hum:.\*  
18: em\_in:.\*  
19: em\_mu:.\*  
20: em\_ov:.\*  
21: em\_or:.\*  
22: em\_ov:.\*  
23: em\_pat:.\*  
24: em\_ph:.\*  
25: em\_pl:.\*  
26: em\_ro:.\*  
27: em\_str:.\*

28: em\_un:.\*  
29: em\_vl:.\*  
30: em\_hvg\_hum:.\*  
31: em\_hvg\_inv:.\*  
32: em\_hvg\_other:.\*  
33: em\_hvg\_mus:.\*  
34: em\_hvg\_pln:.\*  
35: em\_hvg\_rdt:.\*  
36: em\_hvg\_mam:.\*  
37: em\_hvg\_vrt:.\*  
38: em\_sy:.\*  
39: em\_hvg\_hum:.\*  
40: em\_hvg\_mus:.\*  
41: em\_hvg\_other:.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	714	100.0	714 6	BD245275
2	714	100.0	41708 6	BD245281
3	714	100.0	41708 6	AR368770
4	24	3.4	45861 3	DMC80H7
5	24	3.4	62422 2	AC128735
6	24	3.4	74084 2	AC017603
7	24	3.4	181360 3	AC104141
8	24	3.4	206551 2	AC115789
9	24	3.4	304204 3	AE003421
10	23	3.2	729 9	HSA328489
11	23	3.2	6234 6	AX346523
12	23	3.2	14535 3	AF442957
13	23	3.2	14536 3	AF467260
14	23	3.2	135772 10	AC122478
15	23	3.2	166478 9	AC105750
16	23	3.2	180760 2	AC131665
17	23	3.2	209969 2	AC102396
18	23	3.2	223156 2	AC111742
19	23	3.2	246528 2	AC128573
20	22	3.1	6075 6	AX346452
21	22	3.1	142569 2	AC133381
22	22	3.1	152323 5	AL954183
23	22	3.1	158381 2	AC147528
24	22	3.1	162451 9	AL353597
25	22	3.1	171708 9	AC067956
26	22	3.1	175436 2	BX663508
27	22	3.1	177101 2	AC146642
28	22	3.1	178937 2	BX511195
29	22	3.1	181803 2	BX248503
30	22	3.1	202098 2	BX470244
31	22	3.1	202495 9	CNS01DW6
32	22	3.1	202496 9	CNS01DW6
33	22	3.1	217707 5	BX248129
				BD245275 Developme
				BD245281 Developme
				AR368770 Sequence
				AL031027 Drosophi1
				AC128735 Drosophi1
				AC017603 Drosophi1
				AC104141 Drosophi1
				AC115789 Mus muscu
				AE003421 Drosophi1
				AJ328489 Homo sapi
				AX346523 Sequence
				AF442957 Ostrinia
				AF467260 Ostrinia
				AC122478 Mus muscu
				AC105750 Homo sapi
				AC131665 Mus muscu
				AC102396 Mus muscu
				AC111742 Rattus no
				AC128573 Rattus no
				AX346452 Sequence
				AC133381 Rattus no
				AL954183 Zebrafish
				AC147528 Otomemur
				AL353597 Human DNA
				AC067956 Homo sapi
				BX663508 Dario rer
				AC146642 Otomemur
				BX511195 Dario rer
				BX248503 Dario rer
				BX470244 Dario rer
				AL136418 Human chr
				AL139054 Human chr
				BX248129 Zebrafish

34	c	31	225702	2	AC121687	AC121687 Rattus no	c	90	21	2.9	198750	8	ATCHARV85	AL161589 Arabidops
35	c	31	230766	2	AC113698	AC113698 Rattus no	c	91	21	2.9	199362	2	AC145945	AC145945 Gallus ga
36	c	31	231383	5	AL844512	AL844512 Zebrafish	c	92	21	2.9	201128	2	AC111034	AC111034 Mus muscu
37	c	31	234724	10	AL683894	AL683894 Mouse DNA	c	93	21	2.9	202060	10	AC122250	AC122250 Mus muscu
38	c	31	244650	2	AC106532	AC106532 Rattus no	c	94	21	2.9	203257	10	AL596450	AL596450 Mouse DNA
39	c	31	248546	2	AC133690	AC133690 Rattus no	c	95	21	2.9	220487	2	AC094211	AC094211 Rattus no
40	c	31	251720	2	AC094479	AC094479 Rattus no	c	96	21	2.9	228065	2	AC146508	AC146508 Pan trogl
41	c	31	253798	2	AC128701	AC128701 Rattus no	c	97	21	2.9	229682	2	AC098363	AC098363 Rattus no
42	c	31	256945	2	AC097423	AC097423 Rattus no	c	98	21	2.9	238780	2	AC106635	AC106635 Rattus no
43	c	31	260277	2	AC114063	AC114063 Rattus no	c	99	21	2.9	247150	2	AC135416	AC135416 Medicago
44	c	3.1	274382	2	AC115329	AC115329 Rattus no	c	100	21	2.9	249002	2	BX649347	BX649347 Dantio rer
45	c	2.9	1207	3	ENHACTIN	M19871 E. histolyti	c	101	21	2.9	254524	2	AC095780	AC095780 Rattus no
46	c	2.9	2000	6	AX509503	AX509503 Sequence	c	102	21	2.9	254609	2	AC095753	AC095753 Rattus no
47	c	2.9	3510	3	U64538	U64538 Drosophila	c	103	21	2.9	273447	2	AC123481	AC123481 Rattus no
48	c	2.9	5156	6	AR085703	AR085703 Sequence	c	104	21	2.9	301136	3	AE003391	AE003391 Drosophila
49	c	2.9	5156	6	AR260569	AR260569 Sequence	c	105	21	2.9	331039	3	AC116988	AC116988 Dictyoste
50	c	2.9	5156	6	AR390840	AR390840 Sequence	c	106	21	2.9	349980	6	AX344572	AX344572 Sequence
51	c	2.9	6050	6	AX346913	AX346913 Sequence	c	107	20	2.8	134	3	AY145067	AY145067 Drosophila
52	c	2.9	8700	8	AF068574	AF068574 Arabidops	c	108	20	2.8	243	11	G74593	G74593 STS-283 Sm
53	c	2.9	18544	2	AC020199	AC020199 Drosophila	c	109	20	2.8	552	6	AX477761	AX477761 Sequence
54	c	2.9	28756	3	CFE2785	Z48582 Caenorhabdi	c	110	20	2.8	632	8	AF318995	AF318995 Postelsia
55	c	2.9	43159	8	AF193903	AF193903 Cafeteria	c	111	20	2.8	709	9	HSAA38128	AJ338128 Homo sapi
56	c	2.9	65811	9	AL451145	AL451145 Human DNA	c	112	20	2.8	1325	3	AF072442	AF072442 Plasmodiu
57	c	2.9	88270	8	AP004875	AP004875 Human DNA	c	113	20	2.8	1409	6	AX509286	AX509286 Sequence
58	c	2.9	94695	8	ATF23E13	ATF23E13 Arabidops	c	114	20	2.8	1863	8	BT002936	BT002936 Arabidops
59	c	2.9	101901	8	AP003377	AP003377 Oryza sat	c	115	20	2.8	2232	8	SCNAP4	X16727 Yeast HAP4
60	c	2.9	116635	2	AC147537	AC147537 Medicago	c	116	20	2.8	2412	1	AF325895	AF325895 Stepiyloc
61	c	2.9	120380	2	AC147482	AC147482 Medicago	c	117	20	2.8	2636	8	AF203584	AF203584 Zornila sp
62	c	2.9	138989	2	AC027186	AC027186 Homo sapi	c	118	20	2.8	3427	8	SCYRL110C	228110 S. cerevisia
63	c	2.9	143538	2	AC026555	AC026555 Homo sapi	c	119	20	2.8	3604	6	BD193886	BD193886 Enterococ
64	c	2.9	146705	9	AC007971	AC007971 Homo sapi	c	120	20	2.8	4261	8	SCMGMDNA	X62834 S. cerevisia
65	c	2.9	147246	2	AP003538	AP003538 Oryza sat	c	121	20	2.8	4377	8	SCYOR211C	275119 S. cerevisia
66	c	2.9	150900	2	AC068075	AC068075 Homo sapi	c	122	20	2.8	4300	5	SSGNRHR	X74957 S. salar sgm
67	c	2.9	152451	9	AC028674	AC028674 Homo sapi	c	123	20	2.8	4545	8	SCYRL109W	228109 S. cerevisia
68	c	2.9	155001	2	AC013827	AC013827 Homo sapi	c	124	20	2.8	4615	8	YSCDYN1PA	L07419 Saccharomyc
69	c	2.9	156527	9	AL161439	AL161439 Human DNA	c	125	20	2.8	5318	8	SCYOR212W	275120 S. cerevisia
70	c	2.9	159193	2	AP004792	AP004792 Oryza sat	c	126	20	2.8	6067	6	AX279988	AX279988 Sequence
71	c	2.9	163623	2	AP005203	AP005203 Homo sapi	c	127	20	2.8	6067	6	AX336087	AX336087 Sequence
72	c	2.9	163981	9	AC0095647	AC0095647 Homo sapi	c	128	20	2.8	6067	6	AX336408	AX336408 Sequence
73	c	2.9	164943	9	AP005272	AP005272 Homo sapi	c	129	20	2.8	6134	6	AX346084	AX346084 Sequence
74	c	2.9	167350	2	AC128717	AC128717 Oryza sat	c	130	20	2.8	6548	8	SPPOLAL	X69673 Schistosach
75	c	2.9	167875	9	AL512506	AL512506 Human DNA	c	131	20	2.8	7187	6	AX344629	AX344629 Sequence
76	c	2.9	169663	9	AC146232	AC146232 Pan trogl	c	132	20	2.8	7203	6	AX346953	AX346953 Sequence
77	c	2.9	169702	2	AL356385	AL356385 Homo sapi	c	133	20	2.8	7631	6	AX345762	AX345762 Sequence
78	c	2.9	170560	2	BX648444	BX648444 Dantio rer	c	134	20	2.8	8883	6	AX251519	AX251519 Sequence
79	c	2.9	170585	2	AC068815	AC068815 Homo sapi	c	135	20	2.8	12356	6	AX251263	AX251263 Sequence
80	c	2.9	174739	9	AL356428	AL356428 Human DNA	c	136	20	2.8	12787	5	AB11192054	AB111923 Oryzalas 1
81	c	2.9	177727	10	AL732368	AL732368 Mouse DNA	c	137	20	2.8	15109	6	AR353926	AR353926 Sequence
82	c	2.9	178452	2	AC133925	AC133925 Oryza sat	c	138	20	2.8	15121	6	AX344831	AX344831 Sequence
83	c	2.9	178965	3	AC010117	AC010117 Drosophila	c	139	20	2.8	15152	1	AE001171	AE001171 Botreilia
84	c	2.9	184478	2	AC134322	AC134322 Medicago	c	140	20	2.8	16823	1	AE000793	AE000793 Botreilia
85	c	2.9	185095	8	AP003436	AP003436 Oryza sat	c	141	20	2.8	16933	1	BBU43414	U43414 Botreilia bu
86	c	2.9	185481	2	AC091088	AC091088 Oryza sat	c	142	20	2.8	17626	2	AC014858	AC014858 Drosophila
87	c	2.9	186044	2	AC023512	AC023512 Homo sapi	c	143	20	2.8	18519	2	AF019781	AF019781 Drosophila
88	c	2.9	188350	2	AC016501	AC016501 Homo sapi	c	144	20	2.8	24900	3	AF016654	AF016654 Caenorhab
89	c	2.9	188557	1	BX246586	BX246586 Blochmann	c	145	20	2.8	32415	9	AC013646	AC013646 Homo sapi

146	c 147	20	2.8 32568	3	CEM02B8	281136 Caenorhabdit	c 203	20	2.8 131403	14	AE271059	AF271059 Helicover
c 148	c 149	20	2.8 32788	3	CE333H1	248783 Caenorhabdit	c 204	20	2.8 131903	9	HS360E18	262203 Human DNA s
c 150	c 151	20	2.8 33173	8	SC33MB	X32441 S.cerevisia	c 205	20	2.8 133116	2	AC146631	AC146631 Medicago
c 152	c 153	20	2.8 33887	8	AL606828	AL606828 Human DNA	c 206	20	2.8 136374	2	AC142035	AC142035 Rattus no
c 154	c 155	20	2.8 34284	8	SPAC3H5	239286 S.pombe chr	c 207	20	2.8 136814	9	AC064826	AC064826 Homo sapi
c 156	c 157	20	2.8 35757	8	SCAPLAP	X71133 S.cerevisia	c 208	20	2.8 137911	2	AC009769	AC009769 Homo sapi
c 158	c 159	20	2.8 43090	3	CEC08B6	272502 Caenorhabdit	c 209	20	2.8 139843	2	AL158145	AL158145 Homo sapi
c 160	c 161	20	2.8 52872	9	AC117946	AC117946 Homo sapi	c 210	20	2.8 140385	9	HS20B11	AL031770 Human DNA
c 162	c 163	20	2.8 53721	2	AC013963	AC013963 Drosophila	c 211	20	2.8 142257	5	BX005151	BX005151 Zebrafish
c 164	c 165	20	2.8 60901	9	AL160406	AL160406 Human DNA	c 212	20	2.8 143669	9	AP006307	AP006307 Homo sapi
c 166	c 167	20	2.8 62104	2	AC024919	AC024919 Homo sapi	c 213	20	2.8 144286	2	AC108897	AC108897 Felis cat
c 168	c 169	20	2.8 64263	9	AC132660	AC132660 Homo sapi	c 214	20	2.8 144388	2	AC091433	AC091433 Homo sapi
c 170	c 171	20	2.8 69133	9	AL691458	AL691458 Human DNA	c 215	20	2.8 144841	9	AC108101	AC108101 Homo sapi
c 172	c 173	20	2.8 74749	2	AC137669	AC137669 Medicago	c 216	20	2.8 145019	2	AC053488	AC053488 Homo sapi
c 174	c 175	20	2.8 75001	9	AC093167	AC093167 Homo sapi	c 217	20	2.8 145926	2	AC021697	AC021697 Homo sapi
c 176	c 177	20	2.8 77350	8	ATT23B15	AL135972 Arabidops	c 218	20	2.8 146242	10	AC122539	AC122539 Mus muscu
c 178	c 179	20	2.8 81092	2	AC021397	AC021397 Homo sapi	c 219	20	2.8 147803	9	ALJ35667	ALJ35667 Human DNA
c 180	c 181	20	2.8 85735	9	AC069336	AC069336 Homo sapi	c 220	20	2.8 148286	5	BX470246	BX470246 Human DNA
c 182	c 183	20	2.8 87770	8	AP003907	AP003907 Oryza sat	c 221	20	2.8 148678	5	AL029281	AL029281 Zebrafish
c 184	c 185	20	2.8 88643	9	AC022522	AC022522 Arabidops	c 222	20	2.8 148720	2	AC019353	AC019353 Homo sapi
c 186	c 187	20	2.8 91516	9	AL731577	AL731577 Human DNA	c 223	20	2.8 148870	9	HS173A13	AL035688 Human DNA
c 188	c 189	20	2.8 92900	8	AP003825	AP003825 Oryza sat	c 224	20	2.8 149335	2	AC009651	AC009651 Homo sapi
c 190	c 191	20	2.8 95739	2	AP004644	AP004644 Oryza sat	c 225	20	2.8 152019	2	BX663494	BX663494 Homo sapi
c 192	c 193	20	2.8 98902	9	HS128N22	237629 Human DNA s	c 226	20	2.8 152306	9	AC113617	AC113617 Homo sapi
c 194	c 195	20	2.8 101502	9	AC092280	AC092280 Homo sapi	c 227	20	2.8 152553	9	CNS010XE	AL139295 Human chr
c 196	c 197	20	2.8 102029	9	AC133537	AC133537 Homo sapi	c 228	20	2.8 152607	2	AC107321	AC107321 Felis cat
c 198	c 199	20	2.8 106627	5	AL592202	AL592202 Zebrafish	c 229	20	2.8 153571	1	AF454824	AF454824 Enterococ
c 200	c 201	20	2.8 108100	9	AC103881	AC103881 Homo sapi	c 230	20	2.8 153867	10	AC122501	AC122501 Mus muscu
c 202	c 203	20	2.8 110000	2	AC094933_0	AC094933 Rattus no	c 231	20	2.8 153941	2	BX322575	BX322575 Homo sapi
c 204	c 205	20	2.8 110000	2	AC097394_1	AC097394_1 Homo sapi	c 232	20	2.8 154918	9	HS3D7678	AL121957 Human DNA
c 206	c 207	20	2.8 110000	2	AC097394_2	AC097394_2 Homo sapi	c 233	20	2.8 154924	2	AC132153	AC132153 Homo sapi
c 208	c 209	20	2.8 110000	2	AC106120_2	AC106120_2 Homo sapi	c 234	20	2.8 155680	2	AC120887	AC120887 Homo sapi
c 210	c 211	20	2.8 110000	2	AC115281_1	AC115281_1 Homo sapi	c 235	20	2.8 156978	2	AC023379	AC023379 Oryza sat
c 212	c 213	20	2.8 110000	2	AC120430_0	AC120430 Mus muscu	c 236	20	2.8 157270	9	AF236874	AF236874 Homo sapi
c 214	c 215	20	2.8 110000	2	AC120922_2	AC120922_2 Homo sapi	c 237	20	2.8 157561	3	AC099309	AC099309 Homo sapi
c 216	c 217	20	2.8 110000	2	BX546456_1	Continuation (2 of	c 238	20	2.8 157743	2	AC140898	AC140898 Homo sapi
c 218	c 219	20	2.8 110000	2	PFMAL13_18	Continuation (19 of	c 239	20	2.8 158019	8	CNS08CAU	AL844497 Oryza sat
c 220	c 221	20	2.8 110000	3	AC116957_0	AC116957 Dictyoste	c 240	20	2.8 158666	2	AC140420	AC140420 Mus muscu
c 222	c 223	20	2.8 110000	9	AE014305_4	Continuation (5 of	c 241	20	2.8 158710	2	AC147467	AC147467 Homo sapi
c 224	c 225	20	2.8 110879	2	AC138795_1	AC138795 Homo sapi	c 242	20	2.8 158710	9	ALJ360020	ALJ360020 Human DNA
c 226	c 227	20	2.8 114218	2	AC146536	AC146536 Daeypus n	c 243	20	2.8 159593	2	AC007924	AC007924 Homo sapi
c 228	c 229	20	2.8 115224	9	ALJ359539	ALJ359539 Human DNA	c 244	20	2.8 160762	9	AP000475	AP000475 Homo sapi
c 230	c 231	20	2.8 116557	9	AC107022	AC107022 Homo sapi	c 245	20	2.8 161826	9	ALJ38532	ALJ38532 Homo sapi
c 232	c 233	20	2.8 116871	2	ALJ38738	ALJ38738 Homo sapi	c 246	20	2.8 162575	9	ALJ57829	ALJ57829 Homo sapi
c 234	c 235	20	2.8 117166	2	AC146366	AC146366 Daeypus n	c 247	20	2.8 163040	2	AC126240	AC126240 Felis cat
c 236	c 237	20	2.8 117434	9	HS0J5656	AL049742 Human DNA	c 248	20	2.8 163246	9	AC010196	AC010196 Homo sapi
c 238	c 239	20	2.8 118374	8	AC025416	AC025416 Genomic s	c 249	20	2.8 163443	5	ALJ773542	ALJ773542 Zebrafish
c 240	c 241	20	2.8 121675	2	AC144645	AC144645 Medicago	c 250	20	2.8 163604	2	AP006301	AP006301 Homo sapi
c 242	c 243	20	2.8 122241	2	AP004129	AP004129 Oryza sat	c 251	20	2.8 164690	2	AC016846	AC016846 Homo sapi
c 244	c 245	20	2.8 123576	9	AC015969	AC015969 Homo sapi	c 252	20	2.8 165152	9	ALJ589669	ALJ589669 Human DNA
c 246	c 247	20	2.8 124096	9	AC005247	AC005247 Homo sapi	c 253	20	2.8 165154	2	ALJ41958	ALJ41958 Homo sapi
c 248	c 249	20	2.8 124169	2	AC146752	AC146752 Medicago	c 254	20	2.8 165773	9	ALJ57037	ALJ57037 Homo sapi
c 250	c 251	20	2.8 125238	9	AC008842	AC008842 Homo sapi	c 255	20	2.8 165870	9	AC025089	AC025089 Homo sapi
c 252	c 253	20	2.8 127292	2	BX465836	BX465836 Danio rer	c 256	20	2.8 166156	5	BX649398	BX649398 Zebrafish
c 254	c 255	20	2.8 128525	8	AP003118	AP003118 Oryza sat	c 257	20	2.8 166349	2	AC013707	AC013707 Homo sapi
c 256	c 257	20	2.8 130760	14	AF303045	AF303045 Helicover	c 258	20	2.8 166349	2	AC013707	AC013707 Homo sapi
c 258	c 259	20	2.8 130869	14	AF334030	AF334030 Helicover	c 259	20	2.8 166452	9	AC090453	AC090453 Homo sapi

260	2.8	166860	2	BX323866	Danio rer	317	2.8	183540	10	AC084416	AC084416 Mus muscu
261	2.8	167912	3	AC007650	AC007650 Drosophi1	318	2.8	186030	8	CNS086CTW	AL731747 Oryza sat
262	2.8	168186	2	AC117385	AC117385 Homo sapi	319	2.8	188057	2	AC023923	AC023923 Homo sapi
263	2.8	168518	2	BX548172	BX548172 Danio rer	320	2.8	188283	2	AC115661	AC115661 Rattus no
264	2.8	168909	9	AC010165	AC010165 Homo sapi	321	2.8	188524	2	AC123754	AC123754 Mus muscu
265	2.8	169288	9	AL583853	AL583853 Human DNA	322	2.8	188713	2	AC128580	AC128580 Rattus no
266	2.8	169530	5	BX004756	BX004756 zebrafish	323	2.8	189286	9	AC093906	AC093906 Homo sapi
267	2.8	169689	2	BX323459	BX323459 Danio rer	324	2.8	191815	2	AL995334	AL995334 Danio rer
268	2.8	170095	9	AL356131	AL356131 Human DNA	325	2.8	192550	2	AC026103	AC026103 Homo sapi
269	2.8	170543	9	AC021012	AC021012 Homo sapi	326	2.8	192863	9	AL354763	AL354763 Human DNA
270	2.8	170544	9	CNS050TC	AL355093 Human chr	327	2.8	193803	9	AC022819	AC022819 Homo sapi
271	2.8	170630	2	AC034163	AC034163 Homo sapi	328	2.8	194672	2	BX890620	BX890620 Danio rer
272	2.8	170862	2	AC087784	AC087784 Homo sapi	329	2.8	194717	9	AC113424	AC113424 Homo sapi
273	2.8	171068	9	AL356241	AL356241 Human DNA	330	2.8	194979	3	AC091209	AC091209 Drosophi1
274	2.8	171078	5	AL845301	AL845301 zebrafish	331	2.8	195660	2	BX649568	BX649568 Danio rer
275	2.8	171081	2	AC023402	AC023402 Homo sapi	332	2.8	196604	2	AL627100	AL627100 Homo sapi
276	2.8	171135	9	AC093895	AC093895 Homo sapi	333	2.8	196604	2	AL627100	AL627100 Homo sapi
277	2.8	171141	5	AL844196	AL844196 zebrafish	334	2.8	196664	2	AC106628	AC106628 Rattus no
278	2.8	171559	10	AL611982	AL611982 Mouse DNA	335	2.8	197346	9	AC008039	AC008039 Homo sapi
279	2.8	171632	9	AC110760	AC110760 Homo sapi	336	2.8	197664	2	BX323543	BX323543 Danio rer
280	2.8	172180	9	AC109494	AC109494 Homo sapi	337	2.8	198448	10	AC115118	AC115118 Mus muscu
281	2.8	172190	3	AC010668	AC010668 Drosophi1	338	2.8	199412	10	AC122342	AC122342 Mus muscu
282	2.8	172324	2	AC111345	AC111345 Rattus no	339	2.8	199542	2	AC129961	AC129961 Mus muscu
283	2.8	172540	3	AC010071	AC010071 Drosophi1	340	2.8	199601	2	AC135240	AC135240 Mus muscu
284	2.8	172558	9	AC023509	AC023509 Homo sapi	341	2.8	199646	10	AC122664	AC122664 Mus muscu
285	2.8	172834	2	AC011277	AC011277 Homo sapi	342	2.8	199894	2	BX247812	BX247812 Danio rer
286	2.8	172898	9	AL929288	AL929288 Human DNA	343	2.8	199896	2	AC127812	AC127812 Rattus no
287	2.8	173631	2	AC016897	AC016897 Homo sapi	344	2.8	200562	5	AL929016	AL929016 zebrafish
288	2.8	173845	9	AC018662	AC018662 Human chr	345	2.8	202848	2	AC113503	AC113503 Mus muscu
289	2.8	173853	2	AC018999	AC018999 Homo sapi	346	2.8	202911	2	AC119063	AC119063 Pan trogl
290	2.8	174012	5	AL929503	AL929503 zebrafish	347	2.8	203128	10	AL732565	AL732565 Mouse DNA
291	2.8	174028	2	AC067831	AC067831 Homo sapi	348	2.8	203574	2	AC117660	AC117660 Mus muscu
292	2.8	174622	5	BX005044	BX005044 zebrafish	349	2.8	204303	2	AC123111	AC123111 Rattus no
293	2.8	175010	2	BX682557	BX682557 Danio rer	350	2.8	204498	5	AL831781	AL831781 Rattus no
294	2.8	175192	3	AC010576	AC010576 Drosophi1	351	2.8	204539	5	AL934843	AL934843 zebrafish
295	2.8	175621	2	AC035486	AC035486 Homo sapi	352	2.8	204702	9	AL356957	AL356957 Human DNA
296	2.8	175681	2	BX530089	BX530089 Danio rer	353	2.8	205202	2	AC139347	AC139347 Mus muscu
297	2.8	176275	2	AC025551	AC025551 Homo sapi	354	2.8	205855	2	AC128519	AC128519 Rattus no
298	2.8	176366	2	AC118779	AC118779 Mus muscu	355	2.8	206960	2	AC128121	AC128121 Rattus no
299	2.8	176432	2	AC130794	AC130794 Felis cat	356	2.8	206982	2	BX510641	BX510641 Danio rer
300	2.8	176821	9	AC016080	AC016080 Homo sapi	357	2.8	207256	10	AL669950	AL669950 Mouse DNA
301	2.8	177087	10	AL672293	AL672293 Mouse DNA	358	2.8	207622	2	BX322531	BX322531 Danio rer
302	2.8	177761	9	AC037479	AC037479 Homo sapi	359	2.8	208168	2	BX664618	BX664618 Danio rer
303	2.8	178148	5	BX005011	BX005011 zebrafish	360	2.8	208219	2	AC120689	AC120689 Rattus no
304	2.8	178281	2	AC118622	AC118622 Mus muscu	361	2.8	209697	2	AC123632	AC123632 Mus muscu
305	2.8	178491	2	BX005174	BX005174 Danio rer	362	2.8	211463	2	AC073499	AC073499 Homo sapi
306	2.8	178495	2	BX510328	BX510328 Danio rer	363	2.8	212482	14	AF303741	AF303741 Chilio liri
307	2.8	178610	10	AC105951	AC105951 Mus muscu	364	2.8	212724	2	AC140982	AC140982 Mus muscu
308	2.8	179202	2	AC025935	AC025935 Homo sapi	365	2.8	215464	2	BX572645	BX572645 Danio rer
309	2.8	179777	2	AC067879	AC067879 Homo sapi	366	2.8	215651	2	AC132634	AC132634 Rattus no
310	2.8	180389	9	AC063944	AC063944 Homo sapi	367	2.8	215848	2	BX323876	BX323876 Danio rer
311	2.8	180650	9	AC109474	AC109474 Homo sapi	368	2.8	216143	3	AC084197	AC084197 Caenorhab
312	2.8	181419	9	AL445984	AL445984 Human DNA	369	2.8	216152	2	AC101858	AC101858 Mus muscu
313	2.8	181443	9	AC099786	AC099786 Homo sapi	370	2.8	217462	2	AC137222	AC137222 Rattus no
314	2.8	182018	2	AC015464	AC015464 Homo sapi	371	2.8	217616	2	AC079531	AC079531 Mus muscu
315	2.8	182020	9	AC113170	AC113170 Homo sapi	372	2.8	219283	2	AC108550	AC108550 Rattus no
316	2.8	182061	2	AC102217	AC102217 Mus muscu	373	2.8	220157	2	AC105462	AC105462 Rattus no



374	20	2.8 220715	9	AC012410	AC012410 Homo sapi	c 431	20	2.8 348650	1	AP003364	AP003364 Staphyloc
375	20	2.8 221926	2	EX005245	Danio rer	c 432	20	2.8 349980	6	AX345466	AX345466 Sequence
c 376	20	2.8 223728	2	AC097906	AC097906 Rattus no	c 433	19	2.7 285	1	AF358691	AF358691 Helicobac
377	20	2.8 227413	3	AE003702	Drosophila	c 434	19	2.7 298	3	AF154730	AF154730 Megascella
378	20	2.8 229799	2	AC097797	Rattus no	c 435	19	2.7 342	3	AF126312	AF126312 Megascella
c 379	20	2.8 230206	2	AC114140	Rattus no	c 436	19	2.7 394	3	AF154728	AF154728 Megascella
c 380	20	2.8 230841	2	AC103437	Rattus no	c 437	19	2.7 504	5	AF325252	AF325252 Homibacru
381	20	2.8 231373	2	AC112543	Rattus no	c 438	19	2.7 639	11	BN057815	BN057815 S212P6747
382	20	2.8 231919	2	AC111770	Rattus no	c 439	19	2.7 671	6	AX685991	AX685991 Sequence
c 383	20	2.8 232834	10	ALB84467	Mouse DNA	c 440	19	2.7 820	11	BN058264	BN058264 S212P6542
384	20	2.8 234622	2	AC135834	Rattus no	c 441	19	2.7 910	8	AY122437	AY122437 Forchhamm
c 385	20	2.8 235927	2	AC116577	Mus muscu	c 442	19	2.7 938	8	AY122465	AY122465 Towarila P
c 386	20	2.8 236261	2	AC123165	AC123165 Rattus no	c 443	19	2.7 975	10	AB037362S7	AB037362 Mus muscu
c 387	20	2.8 237247	10	AC095563	AC095563 Rattus no	c 444	19	2.7 1002	1	AF416986	AF416986 Pasteurel
388	20	2.8 238577	2	AC098281	Rattus no	c 445	19	2.7 1220	6	AX429478	AX429478 Sequence
389	20	2.8 239069	2	AC108289	Rattus no	c 446	19	2.7 1653	8	AP004501	AP004501 Lotrus cor
c 390	20	2.8 239803	2	AC094312	Rattus no	c 447	19	2.7 1653	10	AB016795	AB016795 Mus muscu
391	20	2.8 242308	2	AC103157	Rattus no	c 448	19	2.7 1707	8	SPCARANG	SPCARANG Rattus no
392	20	2.8 243075	2	AC097827	Rattus no	c 449	19	2.7 1720	3	AF153409	AF153409 Trypanoso
c 393	20	2.8 245090	2	EX097827	Danio rer	c 450	19	2.7 1960	3	AY294149	AY294149 Verillillife
c 394	20	2.8 245581	10	AC133000	AC133000 Rattus No	c 451	19	2.7 2078	3	AC114238	AC114238 Dictyoste
c 395	20	2.8 245802	2	AC006279	AC006279 Plasmodiu	c 452	19	2.7 2226	3	MTDVTN	MTDVTN X05914 D. Vitiilis
396	20	2.8 247565	2	AC124873	Rattus no	c 453	19	2.7 2291	6	AX429477	AX429477 Sequence
c 397	20	2.8 248917	2	AC111455	Rattus no	c 454	19	2.7 2558	10	BC063104	BC063104 Mus muscu
c 398	20	2.8 250029	3	AB014816	AB014816 Plasmodiu	c 455	19	2.7 2640	8	AP004924	AP004924 Lotrus cor
399	20	2.8 253305	3	PFMAL3P7	AL034559 Plasmodiu	c 456	19	2.7 2682	6	AR067691	AR067691 Sequence
400	20	2.8 253507	2	AC096421	AC096421 Rattus no	c 457	19	2.7 2682	6	AR337565	AR337565 Sequence
c 401	20	2.8 256446	5	EX088547	zebrafish	c 458	19	2.7 2711	10	BC005616	BC005616 Mus muscu
c 402	20	2.8 256789	2	AC121054	Rattus no	c 459	19	2.7 3039	8	AP006072	AP006072 Lotrus cor
c 403	20	2.8 256867	2	AC109662	Rattus no	c 460	19	2.7 3182	3	DDIRFO3	DDIRFO3 M94625 Periphyra um
c 404	20	2.8 258569	2	AC097908	Rattus no	c 461	19	2.7 4172	9	AK127317	AK127317 Homo sapi
405	20	2.8 260929	3	AE014852	AE014852 Plasmodiu	c 462	19	2.7 4793	9	HSMB08501	HSMB08501 Broad bea
406	20	2.8 262830	2	AC125306	AC125306 Rattus no	c 463	19	2.7 5070	6	AX345702	AX345702 Sequence
407	20	2.8 268409	2	AC130995	Rattus no	c 464	19	2.7 5266	6	AX345404	AX345404 Sequence
c 408	20	2.8 270733	2	AC128455	Rattus no	c 465	19	2.7 5419	2	AC018287	AC018287 Drosophila
c 409	20	2.8 271827	2	AC125062	Mus muscu	c 466	19	2.7 5457	6	AX346738	AX346738 Sequence
c 410	20	2.8 272071	2	AC109111	Rattus no	c 467	19	2.7 5957	14	AB013615	AB013615 Broad bea
411	20	2.8 273331	2	AC110676	AC110676 Rattus no	c 468	19	2.7 5957	14	AB050782	AB050782 Patchoulli
412	20	2.8 276815	2	AC109098	Rattus no	c 469	19	2.7 5989	14	AF144234	AF144234 Broad bea
c 413	20	2.8 279131	2	AC122614	Rattus no	c 470	19	2.7 6089	6	AX251333	AX251333 Sequence
c 414	20	2.8 291061	2	AC099169	AC099169 Rattus no	c 471	19	2.7 6195	6	AX345492	AX345492 Sequence
415	20	2.8 295875	2	AE003532	Drosophila	c 472	19	2.7 6201	6	AX345398	AX345398 Sequence
c 416	20	2.8 299308	2	AC006898	Caenorhab	c 473	19	2.7 6453	6	AX458648	AX458648 Sequence
417	20	2.8 299859	2	AC128993	AC128993 Rattus no	c 474	19	2.7 7069	6	AX344315	AX344315 Sequence
c 418	20	2.8 299932	2	AC129722	AC129722 Rattus no	c 475	19	2.7 7069	6	AX346255	AX346255 Sequence
419	20	2.8 302363	1	AE016948	Enterococ	c 476	19	2.7 7069	6	AX348724	AX348724 Sequence
c 420	20	2.8 304050	1	AP004829	AP004829 Staphyloc	c 477	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
421	20	2.8 307717	2	AC108630	AC108630 Rattus no	c 478	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
c 422	20	2.8 307750	1	AP003136	AP003136 Staphyloc	c 479	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
c 423	20	2.8 308092	3	AY333070	AY333070 Drosophila	c 480	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
424	20	2.8 312488	10	AC139934	AC139934 Caenorhabd	c 481	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
c 425	20	2.8 313573	3	CEX57G11C	CEX57G11C Rattus no	c 482	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
c 426	20	2.8 314421	2	AC110404	AC110404 Rattus no	c 483	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
c 427	20	2.8 328561	2	AE003843	Drosophila	c 484	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
428	20	2.8 340000	9	HSZ1C027	HSZ1C027 Homo sapi	c 485	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
429	20	2.8 348600	1	AB063521	AB063521 Wt991aswo	c 486	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell
c 430	20	2.8 348600	1	AB063521	AB063521 Wt991aswo	c 487	19	2.7 7185	3	DDU42409	DDU42409 Dictyostell

488	19	2.7	7321	6	AX252038	545	19	2.7	39553	3	CEJCB	282274 Caenorhabd.
489	19	2.7	7321	6	AX344420	546	19	2.7	39915	9	AC010512	AC010512 Homo sapi
490	19	2.7	7321	6	AX348817	547	19	2.7	40102	9	AC010647	AC010647 Homo sapi
491	19	2.7	7776	3	U70846	548	19	2.7	40392	3	U21308	U21308 Caenorhabd.
492	19	2.7	7922	6	AX344678	549	19	2.7	41598	9	HS16M16	AL035532 Homo sapi
493	19	2.7	8196	6	AX281427	550	19	2.7	41628	3	U39994	U39994 Caenorhabd.
494	19	2.7	8196	6	AX345994	551	19	2.7	41628	3	U39994	U39994 Caenorhabd.
495	19	2.7	8196	6	AX348693	552	19	2.7	41311	2	HSN3F10	299131 Homo sapi
496	19	2.7	8201	6	AX281285	553	19	2.7	44726	3	U37429	U37429 Caenorhabd.
497	19	2.7	8201	6	AX345208	554	19	2.7	46024	2	AC100659	AC100659 Mus muscu
498	19	2.7	8234	6	AX346551	555	19	2.7	47577	3	AF36436	AF36436 Tetrahyme
499	19	2.7	8392	1	BATROPEA	556	19	2.7	47738	2	AC125417	AC125417 Homo sapi
500	19	2.7	9238	6	AX323752	557	19	2.7	48123	2	AC130288	AC130288 Homo sapi
501	19	2.7	9254	6	AX822423	558	19	2.7	53890	9	AL672310	AL672310 Homo sapi
502	19	2.7	9254	6	AX826063	559	19	2.7	54079	9	AC104172	AC104172 Homo sapi
503	19	2.7	10052	3	CEI3	560	19	2.7	54958	2	AC090760	AC090760 Homo sapi
504	19	2.7	11090	8	SPBP26C9	561	19	2.7	55432	2	AC017613	AC017613 Drosophi1
505	19	2.7	11097	1	AE014103	562	19	2.7	56283	2	AC020012	AC020012 Drosophi1
506	19	2.7	11729	6	AX345797	563	19	2.7	56954	2	BX510330_3	Continuation (4 of
507	19	2.7	11828	1	AE006118	564	19	2.7	59040	9	AC126170	AC126170 Homo sapi
508	19	2.7	12007	6	AX345619	565	19	2.7	59072	2	AC131930	AC131930 Homo sapi
509	19	2.7	12465	6	AX277868	566	19	2.7	60994	9	AL442647	AL442647 Human DNA
510	19	2.7	12465	6	AX345336	567	19	2.7	61082	8	NCB19C19	AL665992 Neurospor
511	19	2.7	14422	3	AF466146	568	19	2.7	62978	2	AC100958	AC100958 Mus muscu
512	19	2.7	15674	6	AX281365	569	19	2.7	63288	2	AC011762	AC011762 Drosophi1
513	19	2.7	15674	6	AX345264	570	19	2.7	63421	2	AC137739	AC137739 Homo sapi
514	19	2.7	15674	6	AX348945	571	19	2.7	64707	3	AC115607	AC115607 Dictyoste
515	19	2.7	15767	6	AX281442	572	19	2.7	65107	2	AC079962	AC079962 Homo sapi
516	19	2.7	15767	6	AX346109	573	19	2.7	65333	2	AC103832	AC103832 Homo sapi
517	19	2.7	17461	3	U23180	574	19	2.7	68421	5	BX005423	BX005423 Zebrafish
518	19	2.7	18218	6	AX346850	575	19	2.7	68550	2	AC118389_5	Continuation (6 of
519	19	2.7	18624	6	AX346604	576	19	2.7	68801	9	AP003399	AP003399 Homo sapi
520	19	2.7	22012	2	AC014468	577	19	2.7	69362	9	AL451132	AL451132 Human DNA
521	19	2.7	22881	10	AF287142	578	19	2.7	70000	8	AP003848	AP003848 Oryza sat
522	19	2.7	23024	6	AX089494	579	19	2.7	70043	9	AL157776	AL157776 Human DNA
523	19	2.7	24071	8	AP006406	580	19	2.7	70511	2	AC091083	AC091083 Homo sapi
524	19	2.7	24707	3	CEFL4E5	581	19	2.7	71482	2	HSN5688	299132 Homo sapi
525	19	2.7	25833	3	CEC0284	582	19	2.7	71971	9	BX293535	BX293535 Human DNA
526	19	2.7	26344	9	AC096671	583	19	2.7	72440	2	AC113794_5	Continuation (6 of
527	19	2.7	26435	3	U00034	584	19	2.7	72631	5	AL929289	AL929289 Zebrafish
528	19	2.7	26855	2	AL1391984	585	19	2.7	72735	8	AP004487	AP004487 Lotus cor
529	19	2.7	27271	3	CEC40H1	586	19	2.7	73053	2	AC100629	AC100629 Mus muscu
530	19	2.7	27454	10	AY215076	587	19	2.7	73635	2	AC100991	AC100991 Mus muscu
531	19	2.7	28105	3	U41011	588	19	2.7	75551	3	AC005111	AC005111 Drosophi1
532	19	2.7	31048	3	U80447	589	19	2.7	76568	3	MBREV	AF538053 Monosiga
533	19	2.7	33270	3	AE016439	590	19	2.7	78293	9	AC004636	AC004636 Homo sapi
534	19	2.7	34000	3	U28992	591	19	2.7	79426	10	ALB07830	ALB07830 Mouse DNA
535	19	2.7	35003	2	AC020194	592	19	2.7	79652	6	AX711882	AX711882 Sequence
536	19	2.7	36261	3	U41535	593	19	2.7	79743	9	AL451064	AL451064 Human DNA
537	19	2.7	36411	9	AC016626	594	19	2.7	81427	9	AC078960	AC078960 Homo sapi
538	19	2.7	36893	9	AC138034	595	19	2.7	82182	2	BX571840	BX571840 Dantio for
539	19	2.7	37036	9	HSN12086	596	19	2.7	82601	9	AL136971	AL136971 Human DNA
540	19	2.7	37640	9	AC003605	597	19	2.7	82652	8	AP006423	AP006423 Lotus cor
541	19	2.7	38289	1	AE000787	598	19	2.7	82804	3	BMXFI	AL606837 Brugia ma
542	19	2.7	38954	9	AC138033	599	19	2.7	83280	9	AP005638	AP005638 Homo sapi
543	19	2.7	38954	9	AC138033	600	19	2.7	83825	2	AC112729	AC112729 Drosophi1
544	19	2.7	39220	3	CET12A7	601	19	2.7	83921	2	AC023848	AC023848 Homo sapi

602	19	2.7	84166	9	AC009095	Homo sapi	c 659	19	2.7	110000	2	AC125589_1	Continuation (2 of
603	19	2.7	84250	10	AF481349	AF481349 Mus muscu	c 660	19	2.7	110000	2	AC129939_2	Continuation (3 of
604	19	2.7	85518	3	AC005449	AC005449 Drosophi	c 661	19	2.7	110000	2	AC130446_2	Continuation (3 of
605	19	2.7	85638	9	AC108126	AC108126 Homo sapi	c 662	19	2.7	110000	2	AC140127_1	Continuation (2 of
606	19	2.7	85902	2	AC127532	AC127532 Homo sapi	c 663	19	2.7	110000	2	AC140833_3	Continuation (4 of
607	19	2.7	86519	9	AC112242	AC112242 Homo sapi	c 664	19	2.7	110000	2	AC145943_1	Continuation (2 of
608	19	2.7	86701	9	AL353654	AL353654 Human DNA	c 665	19	2.7	110000	2	AC145944_1	Continuation (2 of
609	19	2.7	88900	2	AC020204	AC020204 Drosophi	c 666	19	2.7	110000	2	BX510330_2	Continuation (3 of
610	19	2.7	88982	5	AL732598	AL732598 Zebrafish	c 667	19	2.7	110000	2	FPMA13P1_12	Continuation (13 of
611	19	2.7	89677	9	AL732598	AL732598 Human DNA	c 668	19	2.7	110000	10	AY36310252_2	Continuation (13 o
612	19	2.7	89850	8	AC147365	AC147365 Medicago	c 669	19	2.7	110293	9	HSJD768BN3	Continuation (3 of
613	19	2.7	90531	8	AT75K18	AL022580 Arabidops	c 670	19	2.7	110892	2	AP004678	AP004678 Oryza sat
614	19	2.7	91825	2	AC019854	AC019854 Drosophi	c 671	19	2.7	111178	2	AC020018	AC020018 Drosophi
615	19	2.7	92029	2	AL357492	AL357492 Homo sapi	c 672	19	2.7	111664	9	AL591499	AL591499 Human DNA
616	19	2.7	92053	2	AC017270	AC017270 Drosophi	c 673	19	2.7	113217	2	AC141110	AC141110 Medicago
617	19	2.7	92407	6	AB408757	AB408757 Sequence	c 674	19	2.7	113316	2	AC007866	AC007866 trypanoso
618	19	2.7	92407	6	AK067461	AK067461 Sequence	c 675	19	2.7	113584	2	AC092411	AC092411 Felis cat
619	19	2.7	93321	9	BX649379	BX649379 Human DNA	c 676	19	2.7	113762	9	AC005294	AC005294 Homo sapi
620	19	2.7	94158	2	AC119619	AC119619 Homo sapi	c 677	19	2.7	114113	2	AL160005	AL160005 Homo sapi
621	19	2.7	95548	2	AC128940_3	Continuation (4 of	c 678	19	2.7	114340	9	AL358232	AL358232 Human DNA
622	19	2.7	96041	9	AC112643	AC112643 Homo sapi	c 679	19	2.7	114722	9	AC105758	AC105758 Homo sapi
623	19	2.7	96041	9	AC112643	AC112643 Homo sapi	c 680	19	2.7	115828	9	AL356458	AL356458 Human DNA
624	19	2.7	96623	2	AC108370	AC108370 Pan trogl	c 681	19	2.7	116098	2	AC023867	AC023867 Homo sapi
625	19	2.7	97391	9	AC010218	AC010218 Homo sapi	c 682	19	2.7	116540	10	AL954348	AL954348 Mouse DNA
626	19	2.7	97789	2	AL3590113	AL3590113 Human DNA	c 683	19	2.7	116576	9	AL512643	AL512643 Human DNA
627	19	2.7	98340	2	AC138012	AC138012 Medicago	c 684	19	2.7	116806	9	AL512643	AL512643 Human DNA
628	19	2.7	98340	2	AL353716	AL353716 Human DNA	c 685	19	2.7	117273	9	AL511368	AL511368 Human DNA
629	19	2.7	98454	2	AL592068	AL592068 Homo sapi	c 686	19	2.7	118705	8	AC126009	AC126009 Medicago
630	19	2.7	98595	9	AB001329	AB001329 Homo sapi	c 687	19	2.7	118763	9	AC114484	AC114484 Homo sapi
631	19	2.7	99899	2	AC107170_3	Continuation (4 of	c 688	19	2.7	119024	9	AL159987	AL159987 Human DNA
632	19	2.7	100132	9	AC092177	AC092177 Homo sapi	c 689	19	2.7	119450	14	U97553	U97553 Murine hepr
633	19	2.7	100272	9	HSJD842G6	AL109657 Human DNA	c 690	19	2.7	119550	14	AF105037	AF105037 Murine hepr
634	19	2.7	102784	2	AC104708	AC104708 Oryza sat	c 691	19	2.7	119853	9	AL136374	AL136374 Human DNA
635	19	2.7	103408	2	AL606524	AL606524 Homo sapi	c 692	19	2.7	119909	2	AC068935	AC068935 Homo sapi
636	19	2.7	104184	2	BX470110_5	Continuation (6 of	c 693	19	2.7	120000	9	AC004842	AC004842 Homo sapi
637	19	2.7	104186	5	BX088536	BX088536 Zebrafish	c 694	19	2.7	120035	8	AC123596	AC123596 Medicago
638	19	2.7	105239	9	AL390959	AL390959 Human DNA	c 695	19	2.7	120139	9	AC131281	AC131281 Homo sapi
639	19	2.7	105263	2	AC130652	AC130652 Medicago	c 696	19	2.7	120194	9	AL355474	AL355474 Human DNA
640	19	2.7	105297	2	AC140031	AC140031 Medicago	c 697	19	2.7	120688	2	AC139379	AC139379 Mus muscu
641	19	2.7	105682	3	AC116957_3	Continuation (4 of	c 698	19	2.7	121390	2	AC138985	AC138985 Homo sapi
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RESULT 2  
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LOCUS Development of novel antibiotics based on bacteriophage genomics.  
ACCESSION BD245281.1 GI:33055051  
VERSION BD245281.1 GI:33055051  
KEYWORDS JP 2002531107-A/16.  
SOURCE unidentified  
ORGANISM unidentified  
REFERENCE 1 (bases 1 to 41708)  
AUTHORS Pelletier,J., Gros,P. and Dubow,M.  
TITLE Development of novel antibiotics based on bacteriophage genomics  
JOURNAL Patent: JP 2002531107-A 16 24-SEP-2002;  
PHARTECH INC

COMMENT 05 Staphylococcus aureus bacteriophage 77  
PN JP 2002531107-A/16  
PD 24-SEP-2002  
PF 03-DEC-1999 JP 2000585456  
PR 03-DEC-1998 US 60/110992,03-JUN-1999 US 09/326144 PR  
28-SEP-1999 US 09/407804,30-SEP-1999 US 60/157218 PR  
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PELLETIER, PHILLIPPE GROS, MICHAEL DUBOW  
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REFERENCE 2 (bases 1 to 45861)  
AUTHORS Benos, P.  
TITLE Direct Submission  
JOURNAL Submitted (27-Apr-1999) European Drosophila Genome Sequencing Consortium  
COMMENT On Aug 1, 1998 this sequence version replaced gi:3292887.  
Sequence submitted by Takis Benos, EMBL Outstation - The EBI, Hinxton, Cambridge, CB10 1SD, U.K.  
E-mail: benos@ebi.ac.uk on behalf of the European Drosophila Genome Sequencing Consortium. For further information see the European Drosophila Genome Sequencing Consortium's web site:  
<http://edgp.ebi.ac.uk/>.

Coding sequences are predicted from computer analysis, using both gene and CDS prediction programs and matches to other sequences. These predictions and matches have been evaluated by the annotators and may have been refined by hand (in which case a GeneFinder prediction will have no score. The annotators have also used their judgement on what matches to represent in this record. A far more complete annotation record is available from FlyBase (<http://flybase.bio.indiana.edu/>) through the FlyBase Annotation Object linked by the db\_xref qualifier in the Feature Table. The syntax for the representation of annotation used in this record is documented at:  
[ftp://ftp.ebi.ac.uk/pub/databases/edgp/sequence\\_annotation\\_README\\_IMPORTANT](ftp://ftp.ebi.ac.uk/pub/databases/edgp/sequence_annotation_README_IMPORTANT): This sequence is NOT necessarily the entire insert of clone 80H7. It may be shorter, since we are minimising the overlap between clones to 100 bases, by trimming them. Clone 80H7 overlaps to the left with clone BA032611 Clone 80H7 overlaps to the right with clone 196F3

The true right end of clone 80H7 is at position 101 of clone 196F3  
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LOCUS  
DEFINITION  
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PROGRESS \*\*\*, 4 unordered pieces.  
AC128735  
VERSION  
AC128735.3 GI:22711522  
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HTG; HTGS PHASE1.  
SOURCE  
Drosophila melanogaster (fruit fly)  
ORGANISM  
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1 (bases 1 to 62422)  
REFERENCE  
Muzny,D.M., Adams,C., Adio-Oduola,B., Alt-egman,F.R., Allen,C.,  
Alshrocks,S.L., Amarunge,H.C., Are,J.R., Ayala,M., Banks,T.,  
Barbieri,J., Benton,J., Bimage,K., Blankenburg,K., Bonnin,D.,  
Bouck,O., Bowle,S., Britova,M., Brown,E., Brown,M., Bryant,N.P.,  
Buhay,C., Burch,P., Burkett,C., Burrell,K.L., Byrd,N.C.,  
Carton,T.F., Carter,M., Cavazos,S.R., Chacko,J., Chavez,D.,  
Chen,G., Chen,R., Chen,Z., Chowdhury,I., Christopoulos,C.,  
Cleveland,C.D., Cox,C., Coyle,M.D., Dethorne,S.R., David,R.,  
Devila,M.L., Davis,C., Davy-Carroll,L., Dederich,D.A.,  
DeLaney,K.R., Delgado,O., Denn,A.L., Ding,Y., Dihn,H.H.,  
Douthett,K.J., Draper,H., Dugan-Rocha,S., Durbin,K.J.,  
Earhart,C., Edgar,D., Edwards,C.C., Elhaj,C., Escotto,M.,  
Falls,T., Farraguto,D., Flagg,N., Ford,J., Foster,P., Frantz,P.,  
Gabisi,A., Geo,J., Garcia,A., Garner,T., Garza,N., Gill,R.,  
Gorelli,J.H., Guevara,W., Gunatane,P., Hale,S., Hamilton,K.,  
Harris,C., Harris,K., Hart,M., Havlek,P., Hawes,A., Hernandez,J.,  
Hernandez,O., Hodgson,A., Hogues,M., Holloway,C., Hollins,B.,  
Homs,F., Howard,S., Huber,J., Huijts,S., Hume,J., Jackson,L.E.,  
Jackson,B., Jia,Y., Johnson,R., Jolivet,S., Joudah,S.,  
Karlsson,E., Kelly,S., Khan,U., King,L., Korvah,J., Kovar,C.,

Kratovic, J., Kuresh, A., Landry, N., Leal, B., Lewis, L.C., Lewis, L., Li, J., Li, Z., Lichtarge, O., Lien, C., Liu, J., Liu, W., Louisgied, H., Lozano, R.J., Lu, X., Lucier, A., Lucier, R., Luna, R., Ma, J., Maheshwari, M., Mapua, P., Martin, R., Martindale, A., Martinez, E., Massey, E., Mahoney, E., McLeod, M.P., Meador, M., Mel, G., Metzger, M., Miner, G., Miner, Z., Mitchell, T., Mohabbat, K., Morgan, M., Morris, S., Moser, M., Neal, D., Newton, J., Newton, N., Nguyen, A., Nguyen, N., Nguyen, N., Nickerson, E., Nkokenko, S., Ogih, M., Okunomiya, G., Oragunye, N., Oviedo, R., Pace, A., Payton, B., Peery, J., Perez, L., Peters, L., Pickens, R., Primus, E., Pu, L.L., Quiles, M., Ren, Y., Rivers, M., Rojas, A., Rojibokan, I., Rolfe, M., Ruiz, S., Savary, G., Scherer, S., Scott, G., Shen, H., Shochat, N., Sisson, I., Sodergren, E., Sotak, T., Sparks, A., Stanley, H., Stone, H., Sutton, A., Swatek, A., Tabor, P., Tamerisa, A., Tamerisa, K., Tang, H., Tansley, J., Taylor, C., Taylor, T., Telford, B., Thomas, N., Thomas, S., Umami, K., Vasquez, L., Vera, V., Villalón, D., Vinson, R., Wang, Q., Wang, S., Ward-Moore, S., Warren, R., Washington, C., Wellington, S., Williams, G., Williamson, A., Wleczyk, R., Wooden, S., Worley, K., Wu, C., Wu, Y., Wu, Y.F., Zhou, J., Zorilla, S., Nelson, D., Weinstein, G. and Gibbs, R.

Unpublished  
Direct Submission  
2 (bases 1 to 62422)  
Worley, K.C.  
Submitted (23-JUL-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA  
3 (bases 1 to 62422)  
Worley, K.C.  
Submitted (04-SEP-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA  
On Sep 4, 2002 this sequence version replaced gi:22474839.

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Genome Center  
Center: Baylor College of Medicine  
Center code: BCM  
Web site: <http://www.hgsc.bcm.tmc.edu/>  
Contact: hgsc-help@bcm.tmc.edu  
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Project Information  
Center project name: DRP2  
Center clone name: CH223-4018  
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Summary Statistics  
Sequencing vector: Plasmid  
Chemistry: Dye-terminator Big Dye 100% of reads  
Assembly program: Phrap; version 0.990329  
Consensus quality: 60608 bases at least Q40  
Consensus quality: 61160 bases at least Q30  
Consensus quality: 61536 bases at least Q20  
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\* NOTE: Estimated insert size may differ from sequence length  
\* (see [http://www.hgsc.bcm.tmc.edu/docs/genbank\\_draft\\_data.html](http://www.hgsc.bcm.tmc.edu/docs/genbank_draft_data.html)).  
\* NOTE: This is a "working draft" sequence. It currently  
\* consists of 4 contigs. The true order of the pieces  
\* is not known and their order in this sequence record is  
\* arbitrary. Gaps between the contigs are represented as

\* runs of N, but the exact sizes of the gaps are unknown.  
\* This record will be updated with the finished sequence  
\* as soon as it is available and the accession number will  
\* be preserved.

1 2519: contig of 2519 bp in length  
\* 2520 2619: gap of unknown length  
\* 2620 6312: contig of 3693 bp in length  
\* 6313 6412: gap of unknown length  
\* 6413 21388: contig of 14976 bp in length  
\* 21389 21488: gap of unknown length  
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Matches 24; Conservative 0; Mismatches 0

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LOCUS Drosophila melanogaster, \*\*\* SEQUENCING IN PROGRESS \*\*\*  
DEFINITION AC017603  
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AC017603.1 GI:6554394  
VERSION HTG: HTGS PHASE2.  
KEYWORDS HTG: HTGS PHASE2.  
SOURCE Drosophila melanogaster (fruit fly)  
ORGANISM Drosophila melanogaster  
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;  
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;  
Eurytomidae; Drosophilidae; Drosophila.  
1 (bases 1 to 74084)  
Adams, M. and Venter, J.C.  
Submitted (10-DEC-1999) Celera Genomics, 45 West Gude Drive,  
Rockville, MD, USA  
This sequence was identified as CDM:10211430 by the submitter.  
For more information on this record e-mail to fly@celera.com.  
\* NOTE: This is a "working draft" sequence.  
\* This sequence will be replaced  
\* by the finished sequence as soon as it is available and  
\* the accession number will be preserved.

FEATURES  
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 Db 51791 TTGAAATTGAAATTTAAAT 51814

RESULT 7  
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 SOURCE Drosophila melanogaster (fruit fly)  
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REFERENCE 1 (bases 1 to 181360)  
 Muzny,D., Scherer,S., Adams,M.D., Holt,R.A., Evans,C.A.,  
 Gocayne,J.D., Tabor,P., Williamson,A., Homsi,F.H.,  
 Dugan-Rocha,S.D., Sodergren,E.S., Hodgson,A.H., Chen,R.C.,  
 Ayala,M., Scott,G.S., Worley,K.W., Amaratunga,C., Brandon,R.C.,  
 Rogers,Y., An,H., Baldwin,D., Beeson,K.Y., Brown,M., Butay,C.,  
 Busam,D.A., Cantor,A., Chen,G., Chen,Z., Clerc-Blanchard,K.,  
 Denverport,L.B., Dietz,S.M., Ding,Y., Dodson,K., Doup,L.E.,  
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 Liu,W., Kattel,B., McIntosh,T.C., Morgan,M., Moy,M., Murphy,B.,  
 Nelson,K.A., Ndassa,Y., Nguyen,N., Perez,L., Pittman,G.S., Puri,V.,  
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 Wheeler,D., Weinstein,G., Gibbs,R. and Venter,J.C.  
 Direct Submission

TITLE Unpublished  
 JOURNAL 2 (bases 1 to 181360)  
 REFERENCE  
 AUTHORS Worley,K.C., Adams,C., Adio-Oduola,B., Al-Osman,F.R., Allen,C.,  
 Albrooks,S.L., Amaratunga,H.C., Are,J.R., Banks,T., Barbarta,J.,  
 Benton,J., Bimage,K., Blankenburg,K., Bonini,D., Bouck,J.,  
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 Carter,M., Cavazos,S.R., Chacko,J., Chavez,D., Chen,G., Chen,R.,  
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Hollins,B., Homsf., Howard,S., Huber,J., Huliy,K.S., Hume,J.,  
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 Nguyen,A., Nguyen,N., Nguyen,N., Nickerson,E., Nwokoko,S.,  
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 Quiles,M., Ren,Y., Rives,M., Rojas,A., Rojudoan,I., Rolfe,M.,  
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 Sisson,I., Sodergren,E., Sonake,T., Sparks,A., Stanley,H.,  
 Stone,H., Sutton,A., Svatek,A., Tabor,P., Tamerisa,A., Tamerisa,K.,  
 Tang,H., Tansley,J., Taylor,C., Taylor,T., Telford,B., Thomas,N.,  
 Thomas,S., Usami,K., Vasquez,L., Vera,V., Villalon,D., Vinson,R.,  
 Wall,R., Wang,S., Ward-Moore,S., Warren,R., Washington,C.,  
 Washington,S., Williams,G., Williamson,A., Wiczek,R., Woodson,S.,  
 Wu,C., Wu,Y., Wu,Y.F., Zhou,J., Zorrilla,S., Nelson,D.,  
 Weinstein,G. and Gibbs,R.  
 Direct Submission

TITLE Unpublished  
 JOURNAL 3 (bases 1 to 181360)  
 REFERENCE  
 AUTHORS Worley,K.C.  
 TITLE Direct Submission  
 JOURNAL Submitted (05-DEC-2001) Human Genome Sequencing Center, Department  
 of Molecular and Human Genetics, Baylor College of Medicine, One  
 Baylor Plaza, Houston, TX 77030, USA

REFERENCE 4 (bases 1 to 181360)  
 BCM-HGSC.  
 Direct Submission  
 JOURNAL Submitted (11-JAN-2002) Human Genome Sequencing Center, Department  
 of Molecular and Human Genetics, Baylor College of Medicine, One  
 Baylor Plaza, Houston, TX 77030, USA

REFERENCE 5 (bases 1 to 181360)  
 BCM-HGSC.  
 Direct Submission  
 JOURNAL Submitted (01-JUN-2002) Human Genome Sequencing Center, Department  
 of Molecular and Human Genetics, Baylor College of Medicine, One  
 Baylor Plaza, Houston, TX 77030, USA

REFERENCE 6 (bases 1 to 181360)  
 BCM-HGSC.  
 Direct Submission  
 JOURNAL Submitted (24-JUL-2002) Human Genome Sequencing Center, Department  
 of Molecular and Human Genetics, Baylor College of Medicine, One  
 Baylor Plaza, Houston, TX 77030, USA  
 On Jun 1, 2002 this sequence version replaced gi:18129379.  
 INFORMATION: <http://www.hgsc.bcm.tmc.edu/> or email  
 gc-help@bcm.tmc.edu

CLONE LENGTH: This sequence does not necessarily represent the  
 sequenced and submitted once, so the sequence for the remainder of  
 the insert may be found in the record for the adjacent clones.

**ANNOTATION OF FEATURES:**  
STSs are identified using ePCR (Genome Res. 7:541-550) searches of a local database that includes entries from dbSTS, GDB, and local mapping efforts.  
Repeats are identified using RepeatMasker (A. Smit and P. Green unpublished) for Human and Mouse sequences.  
Genes and Region of sequence similarity are identified by BLAST (Nuc. Acids Res. 25:3389-3402) similarity (expect < 1e-34) to the EST and cDNA sequences. Genes demonstrate at least two exons flanked by consensus splice sites that maintained sequence continuity across the splice junctions. Sequences that are not identical matches are annotated as similar.

standard otoclouds attend coverage with a minimum of 2 clones and 2 reads with no ambiguities or 2 chemistries with a minimum of 2 clones and 3 reads with no ambiguities. If the sequence quality for a region does not meet this standard, it will be indicated in the annotation as Low Coverage.

QUALITY OF INDIVIDUAL BASES: This sequence meets stringent quality standards - estimated error rate less than 1 per 10,000 bases. Reports of lowest quality individual bases and measures of base quality are listed below. Description of the metrics can be found at URL: [http://www.hgsc.bcm.tmc.edu/8008/quality\\_info/genbank\\_annotation.html](http://www.hgsc.bcm.tmc.edu/8008/quality_info/genbank_annotation.html).

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DEFINITION	Mus musculus clone RP23-398N2, WORKING DRAFT SEQUENCE, 15 ordered pieces.				
ACCESSION	AC115789				

REFERENCE	AUTHORS	TITLE	JOURNAL	REFERENCE	AUTHORS
1 (bases 1 to 206551)	Birren,B., Nusbbaum,C. and Lander,E.	Mus musculus, clone RP23-398N2	Unpublished	2 (bases 1 to 206551)	Birren,B., Linton,L., Nusbbaum,C., Lander,E., All,A., Allen,N.,

Anderson, S., Barra, N., Bastien, V., Bloom, T., Boguslavsky, L.,  
Bouboulatier, B., Brown, A., Camerota, J., Campopiano, A., Chang, J.,  
Chazarain, G., Choepiel, Y., Colangelo, M., Collins, S., Collamore, A.,  
Cook, A., Cooke, P., Deakrellano, K., Dewar, K., Diaz, J. S., Dodge, S.,  
Faro, S., Ferreira, P., Fitzhugh, W., Gage, D., Galagan, J., Garbino, S.,  
Glinde, S., Gord, S., Goyette, M., Graham, L., Grand-Pierre, N.,  
Hagos, B., Horton, L., Hulme, W., Illov, I., Johnson, R., Jones, C.,  
Kamati, A., Karatas, A., Kells, C., Lacombe, K., Lamaizars, R.,  
Landers, T., Lefoczky, J., Levine, R., Linblad-Tor, K., Liu, G.,  
McCarthy, C., Macdonald, P., Major, J., Marcus, N., Matthews, C.,  
McCarthy, M., McKean, P., McKernan, K., Meldrum, J., Meneus, L.,  
Mihore, T., Mlenge, V., Murphy, T., Naylor, J., Nguyen, C., Nicol, R.,  
Norbu, C., Norman, C. H., O'Connor, I., O'Donnell, P., O'Neill, D.,  
Oliver, J., Peterson, K., Phunhkan, P., Pierre-N., Pollard, V.,  
Raymond, C., Retts, R., Rieback, M., Riley, R., Risse, C., Rogov, P.,  
Roman, J., Rosetti, M., Roy, A., Santos, R., Schauer, S., Schuppach, R.,  
Sennan, S., Severy, P., Spencer, B., Stange-Rothman, N., Stojanovic, N.,  
Struss, N., Subramanian, A., Talmas, J., Tesfaye, S., Theodore, J.,  
Topham, K., Travers, M., Travis, N., Triggilo, J., Vassiliou, H.,  
Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Ye, W. J., Young, G.,  
Zaitoun, J., Zembek, L., Zimmer, A. and Zody, M.

JOURNAL  
Submitted (22-Mar-2022) Whitehead Institute/MIT Center for Genome  
Research, 320 Charles Street, Cambridge, MA 02141, USA  
3 (bases 1 to 206531)  
REFERENCE  
AUTHORS  
Anderson, S., Arachchi, H.M., Barna, N., Bastien, V., Bloom, T.,  
Bogdanovskiy, L., Boukhaltter, B., Canarata, J., Chang, J., Cheepol, Y.,  
Collumore, A., Cook, A., Cooke, P., Corum, B., Dacarlano, K.,  
Diaz, J.S., Dodge, S., Dooley, K., Dorris, L., Erickson, J., Faro, S.,  
Ferreira, P., Fitzgerald, M., Gage, D., Galagan, J., Gardiya, S.,  
Graham, L., Grand-Pierre, N., Hafey, N., Hoggan, D., Hogen, B.,  
Hall, J.J., Horton, L., Hulme, W., Iliev, I., Johnson, R., Jones, C.,  
Kmetz, A., Karetas, A., Kells, C., Landers, T., Levine, R.,  
Lindstedt-Roh, K., Liu, G., Liu, A., Mabbitt, R., MacLean, C.,  
Macdonald, P., Major, J., Manning, J., Matthews, C., McCarthy, M.,  
McLaidin, J., Meneses, L., Mkhova, T., Mlenga, V., Murphy, T., Naylor, J.,  
Neyuen, C., Nicol, R., Norbu, C., O'Connor, T., O'Donnell, P.,  
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Rachpala, A., Ramsamy, U., Raymond, C., Retta, R., Rise, C., Rogov, P.,  
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Spencer, B., Stanger-Thomann, N., Stojanovic, N., Stubbs, M.,  
Talamas, J., Tsefaye, S., Theodore, J., Tophan, K., Travers, M.,  
Vasilev, H., Venkataraman, V.S., Viel, R., Vo, A., Wilson, B., Wu, X.,  
Wyman, D., Young, G., Zahoun, J., Zemek, L., Zimmer, A. and Zody, M.

TITLE  
JOURNAL  
COMMENT

Direct Submission  
Submitted (17-FEB-2003) Whitehead Institute/MIT Center for Genome  
Research, 320 Charles Street, Cambridge, MA 02141, USA  
On Feb 17, 2003 this sequence version replaced gi:21592066.  
All repeats were identified using RepeatMasker:  
Smit, A.F.A. & Green, P. (1996-1997)  
http://ftp.genome.washington.edu/RM/RepeatMasker.html

Genome Center

Center: Whitehead Institute/ MIT Center for Genome Research.

Center code: WIBR

Web site: http://www-seq.wi.mit.edu

Contact: sequence\_submissions@genome.wi.mit.edu

Project Information

Center project name: 123898

Center clone name: 398\_N\_2

Summary Statistics

Sequencing vector: Plasmid; n/a; 100% of reads

Chemistry: Dye-terminator Big Dye; 100% of reads

Assembly program: Phrap; version 0.960731

Consensus quality: 203788 bases at least Q40

Consensus quality: 204444 bases at least Q30

Insert size: 205151; sum-of-contigs

Quality coverage: 10.6 in Q20 bases; sum-of-contigs

\* NOTE: This is a 'working draft' sequence. It currently  
\* consists of 15 contigs. Gaps between the contigs  
\* are represented as runs of N. The order of the pieces  
\* is believed to be correct as given, however the sizes  
\* of the gaps between them are based on estimates that have  
\* provided by the submitter.

\* This sequence will be replaced

\* by the finished sequence as soon as it is available and

\* the accession number will be preserved.

1 2850: contig of 2850 bp in length  
\* 2851 2950: gap of 100 bp  
\* 2951 3647: contig of 697 bp in length  
\* 3648 3747: gap of 100 bp  
\* 3748 4411: contig of 664 bp in length  
\* 4412 4511: gap of 100 bp  
\* 4512 5700: contig of 1189 bp in length  
\* 5701 5800: gap of 100 bp  
\* 5801 7478: contig of 1678 bp in length  
\* 7479 7578: gap of 100 bp  
\* 7579 8461: contig of 883 bp in length  
\* 8462 8561: gap of 100 bp  
\* 8562 12189: contig of 3628 bp in length  
\* 12190 18325: contig of 6036 bp in length  
\* 18326 18425: gap of 100 bp  
\* 18426 22439: contig of 4014 bp in length  
\* 22440 22539: gap of 100 bp  
\* 22540 27236: contig of 4697 bp in length  
\* 27237 27337: gap of 100 bp  
\* 27337 43965: contig of 16629 bp in length  
\* 43966 44065: gap of 100 bp  
\* 44066 61489: contig of 17424 bp in length

\* 61490 61589: gap of 100 bp  
\* 61590 78601: contig of 17012 bp in length  
\* 78602 78701: gap of 100 bp  
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Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 10465 TTAAAGATGTTTAAATTAAT 10442

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DEFINITION	Drosophila melanogaster chromosome X section 5 of 74 of the complete sequence.
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VERSION	AE003421.2 GI:22831488
KEYWORDS	
SOURCE	
ORGANISM	Drosophila melanogaster (fruit fly)
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REFERENCE	1 (bases 1 to 304204)
AUTHORS	Adams,M.D., Celniker,S.E., Holt,R.A., Evans,C.A., Gocayne,J.D., Aamundt,P.G., Scherer,S.E., Li,P.W., Hoskins,R.A., Galle,R.F., George,R.A., Lewis,S.E., Richards,S., Ashburner,M., Henderson,S.N., Sutton,G.G., Wortman,J.R., Yandell,M.D., Zhang,Q., Chen,L.X., Brannon,R.C., Rogers,Y.H., Blasej,R.G., Chapple,M., Pfeiffer,B.D., Wan,K.H., Doyle,C., Baxter,E.G., Helt,G., Nelson,C.R., Gabor,G.L., Abell,J.F., Agbayani,A., An,H.J., Andrews-Pfannkoch,C., Baldwin,D., Ballow,R.M., Basu,A., Bakendale,J., Bayraktaroglu,L., Beasley,E.M., Beeson,K.Y., Bezu,P.V., Berman,B.P., Bhandari,D., Bonshakov,S., Borker,D., Botchan,M.R., Bouck,J., Brocktein,P., Brotter,P., Burke,K.C., Busan,D.A., Butler,H., Cadieu,E., Center,A., Chandrasekhar,I., Chery,J.M., Cawley,S., Dahlke,C., Davenport,L.B., Davis,P., de Pablos,B., Delcher,A., Deng,Z., May,A.D., Dew,I., Dietz,S.M., Dodson,K., Doup,L.E., Downes,M., Dugan-Rocha,S., Dunkey,B.C., Dunn,P., Durbin,K.J., Evangelista,C.C., Ferraz,C., Ferriere,S., Fleischmann,W., Foster,C., Gabrielian,A.E., Garg,N.S., Gelbart,W.M., Glasser,K., Glodet,A., Gong,F., Gorrell,J.H., Gu,Z., Guan,P., Harris,M., Harris,N.L., Harvey,D., Heiman,T.J., Hernandez,J.R., Houck,J., Hostin,D., Houston,K.A., Howland,T.D., Wei,M.H., Ibegwam,C., Jalali,M., Kalush,F., Kapran,G.H., Ke,Z., Kennison,J.A., Ketchum,K.A., Kimmel,B.E., Kodira,C.D., Kraft,C., Krevitz,S., Kulp,D., Lai,Z., Lasko,P., Lei,Y., Levitsky,A.A., Li,J., Li,Z., Liang,Y., Lin,X., Liu,X., Mates,J.B., McIntosh,T.C., McLeod,M.P., McPherson,D., Merkulov,G., Milshina,N.V., Mobarry,C., Moritz,J., Mohtrefi,A., Mount,S.M., Moy,M., Murphy,B., Murphy,L., Muzny,D.M., Nelson,D.L., Nelson,D.R., Nelson,K.A., Nixon,K., Nusser,D.R., Paclob,J.M., Palazzolo,M., Pittman,G.S., Pan,S., Pollard,J., Puri,V., Reese,M.G., Reinert,K., Remington,K., Sanders,R.D., Scheeler,F., Shen,H., Shue,B.C., Siden-Kimms,I., Slapston,M., Skupski,M.P., Smith,T., Spier,E., Spiderling,A.C., Stapleton,M., Strong,R., Sun,E., Svirskas,R., Tector,C., Turner,R., Venter,E., Wang,A.H., Wang,X., Wang,Z.Y., Weissman,D.A., Welterlock,G.M., Weissbach,J., Williams,S.M., Woodcock,Morley,K.C., Wu,D., Yang,S., Yao,Q.A., Ye,J., Yeh,R.F., Zaretski,J.S., Zhan,M., Zhang,G., Zhao,Q., Zheng,L., Zheng,X.H., Zhong,R.N., Zhong,W., Zhou,X., Zhu,S., Zhu,X., Smith,H.O., Ghab,R.A., Myers,E.W., Rubin,G.M. and Venter,J.C.
TITLE	The genome sequence of Drosophila melanogaster
JOURNAL	Science 287 (5461), 2185-2195 (2000)
MEDLINE	20196006
RUMED	10731132
REFERENCE	2 (bases 1 to 304204)

AUTHORS	Adams,M.D., Celniker,S.E., Holt,R.A., Evans,C.A., Gocayne,J.D., Aamundt,P.G., Scherer,S.E., Li,P.W., Hoskins,R.A., Galle,R.F., George,R.A., Lewis,S.E., Richards,S., Ashburner,M., Henderson,S.N., Sutton,G.G., Wortman,J.R., Yandell,M.D., Zhang,Q., Chen,L.X., Brannon,R.C., Rogers,Y.H., Blasej,R.G., Chapple,M., Pfeiffer,B.D., Wan,K.H., Doyle,C., Baxter,E.G., Helt,G., Nelson,C.R., Gabor,G.L., Abell,J.F., Agbayani,A., An,H.J., Andrews-Pfannkoch,C., Baldwin,D., Ballow,R.M., Basu,A., Bakendale,J., Bayraktaroglu,L., Beasley,E.M., Beeson,K.Y., Bezu,P.V., Berman,B.P., Bhandari,D., Bonshakov,S., Borker,D., Botchan,M.R., Bouck,J., Brocktein,P., Brotter,P., Burke,K.C., Busan,D.A., Butler,H., Cadieu,E., Center,A., Chandrasekhar,I., Chery,J.M., Cawley,S., Dahlke,C., Davenport,L.B., Davis,P., de Pablos,B., Delcher,A., Deng,Z., May,A.D., Dew,I., Dietz,S.M., Dodson,K., Doup,L.E., Downes,M., Dugan-Rocha,S., Dunkey,B.C., Dunn,P., Durbin,K.J., Evangelista,C.C., Ferraz,C., Ferriere,S., Fleischmann,W., Foster,C., Gabrielian,A.E., Garg,N.S., Gelbart,W.M., Glasser,K., Glodet,A., Gong,F., Gorrell,J.H., Gu,Z., Guan,P., Harris,M., Harris,N.L., Harvey,D., Heiman,T.J., Hernandez,J.R., Houck,J., Hostin,D., Houston,K.A., Howland,T.D., Wei,M.H., Ibegwam,C., Jalali,M., Kalush,F., Kapran,G.H., Ke,Z., Kennison,J.A., Ketchum,K.A., Kimmel,B.E., Kodira,C.D., Kraft,C., Krevitz,S., Kulp,D., Lai,Z., Lasko,P., Lei,Y., Levitsky,A.A., Li,J., Li,Z., Liang,Y., Lin,X., Liu,X., Mates,J.B., McIntosh,T.C., McLeod,M.P., McPherson,D., Merkulov,G., Milshina,N.V., Mobarry,C., Moritz,J., Mohtrefi,A., Mount,S.M., Moy,M., Murphy,B., Murphy,L., Muzny,D.M., Nelson,D.L., Nelson,D.R., Nelson,K.A., Nixon,K., Nusser,D.R., Paclob,J.M., Palazzolo,M., Pittman,G.S., Pan,S., Pollard,J., Puri,V., Reese,M.G., Reinert,K., Remington,K., Sanders,R.D., Scheeler,F., Shen,H., Shue,B.C., Siden-Kimms,I., Slapston,M., Skupski,M.P., Smith,T., Spier,E., Spiderling,A.C., Stapleton,M., Strong,R., Sun,E., Svirskas,R., Tector,C., Turner,R., Venter,E., Wang,A.H., Wang,X., Wang,Z.Y., Weissman,D.A., Welterlock,G.M., Weissbach,J., Williams,S.M., Woodcock,Morley,K.C., Wu,D., Yang,S., Yao,Q.A., Ye,J., Yeh,R.F., Zaretski,J.S., Zhan,M., Zhang,G., Zhao,Q., Zheng,L., Zheng,X.H., Zhong,R.N., Zhong,W., Zhou,X., Zhu,S., Zhu,X., Smith,H.O., Ghab,R.A., Myers,E.W., Rubin,G.M. and Venter,J.C.
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AUTHORS	Adams,M.D., Celniker,S.E., Holt,R.A., Evans,C.A., Gocayne,J.D., Aamundt,P.G., Scherer,S.E., Li,P.W., Hoskins,R.A., Galle,R.F., George,R.A., Lewis,S.E., Richards,S., Ashburner,M., Henderson,S.N., Sutton,G.G., Wortman,J.R., Yandell,M.D., Zhang,Q., Chen,L.X., Brannon,R.C., Rogers,Y.H., Blasej,R.G., Chapple,M., Pfeiffer,B.D., Wan,K.H., Doyle,C., Baxter,E.G., Helt,G., Nelson,C.R., Gabor,G.L., Abell,J.F., Agbayani,A., An,H.J., Andrews-Pfannkoch,C., Baldwin,D., Ballow,R.M., Basu,A., Bakendale,J., Bayraktaroglu,L., Beasley,E.M., Beeson,K.Y., Bezu,P.V., Berman,B.P., Bhandari,D., Bonshakov,S., Borker,D., Botchan,M.R., Bouck,J., Brocktein,P., Brotter,P., Burke,K.C., Busan,D.A., Butler,H., Cadieu,E., Center,A., Chandrasekhar,I., Chery,J.M., Cawley,S., Dahlke,C., Davenport,L.B., Davis,P., de Pablos,B., Delcher,A., Deng,Z., May,A.D., Dew,I., Dietz,S.M., Dodson,K., Doup,L.E., Downes,M., Dugan-Rocha,S., Dunkey,B.C., Dunn,P., Durbin,K.J., Evangelista,C.C., Ferraz,C., Ferriere,S., Fleischmann,W., Foster,C., Gabrielian,A.E., Garg,N.S., Gelbart,W.M., Glasser,K., Glodet,A., Gong,F., Gorrell,J.H., Gu,Z., Guan,P., Harris,M., Harris,N.L., Harvey,D., Heiman,T.J., Hernandez,J.R., Houck,J., Hostin,D., Houston,K.A., Howland,T.D., Wei,M.H., Ibegwam,C., Jalali,M., Kalush,F., Kapran,G.H., Ke,Z., Kennison,J.A., Ketchum,K.A., Kimmel,B.E., Kodira,C.D., Kraft,C., Krevitz,S., Kulp,D., Lai,Z., Lasko,P., Lei,Y., Levitsky,A.A., Li,J., Li,Z., Liang,Y., Lin,X., Liu,X., Mates,J.B., McIntosh,T.C., McLeod,M.P., McPherson,D., Merkulov,G., Milshina,N.V., Mobarry,C., Moritz,J., Mohtrefi,A., Mount,S.M., Moy,M., Murphy,B., Murphy,L., Muzny,D.M., Nelson,D.L., Nelson,D.R., Nelson,K.A., Nixon,K., Nusser,D.R., Paclob,J.M., Palazzolo,M., Pittman,G.S., Pan,S., Pollard,J., Puri,V., Reese,M.G., Reinert,K., Remington,K., Sanders,R.D., Scheeler,F., Shen,H., Shue,B.C., Siden-Kimms,I., Slapston,M., Skupski,M.P., Smith,T., Spier,E., Spiderling,A.C., Stapleton,M., Strong,R., Sun,E., Svirskas,R., Tector,C., Turner,R., Venter,E., Wang,A.H., Wang,X., Wang,Z.Y., Weissman,D.A., Welterlock,G.M., Weissbach,J., Williams,S.M., Woodcock,Morley,K.C., Wu,D., Yang,S., Yao,Q.A., Ye,J., Yeh,R.F., Zaretski,J.S., Zhan,M., Zhang,G., Zhao,Q., Zheng,L., Zheng,X.H., Zhong,R.N., Zhong,W., Zhou,X., Zhu,S., Zhu,X., Smith,H.O., Ghab,R.A., Myers,E.W., Rubin,G.M. and Venter,J.C.
TITLE	The genome sequence of Drosophila melanogaster
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/map="2A4-2A4"  
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7767. .8012)

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Query Match 3.4%; Score 24; DB 3; Length 304204;  
Blast Local Similarity 100.0%; Pred. No. 3.8;  
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 466 TTGAAATTGAAATAATTAAT 489  
DB 35189 TTGAAATTGAAATAATTAAT 35212

RESULT 10  
HSA328489 729 bp DNA linear PRI 18-JUL-2002  
LOCUS  
DEFINITION  
HSA-6AC4RS.  
ACCESSION  
AJ328489.1 GI:15872907  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
Homo sapiens (human)  
Eukaryotes; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.  
1 (bases 1 to 729)  
Kutsenko,A.S., Gitzullin,R.Z., Al-Amin,A.N., Wang,F., Kvashta,S.M.,  
Podowski,R.M., Matsushkin,Y.G., Gyanchandani,A., Muravenko,O.V.,



Levitsky,V.G., Kolchanov,N.A., Protopopov,A.I., Kashube,V.I.,  
Kisilev,L.L., Wasserman,W., Wahlstedt,C. and Zabarovsky,E.R.  
NotI flanking sequences: a tool for gene discovery and verification  
of the human genome  
JOURNAL Nucleic Acids Res. 30 (14), 3163-3170 (2002)  
MEDLINE 22131767  
PUBMED 12136098  
REFERENCE 2 (bases 1 to 729)  
AUTHORS Zabarovsky,E.R.  
TITLE Direct Submission  
JOURNAL Submitted (16-MAY-2001) Microbiology and Tumoriobiology Centre,  
Karolinska Institute, Theorells väg, 3, Box 280, Stockholm 171 77,  
Sweden  
FEATURES  
source Location/Qualifiers  
1..729  
/organism="Homo sapiens"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:9606"  
/clone="HSJ-6AC4RS"  
ORIGIN  
Query Match 3.2%; Score 23; DB 9; Length 729;  
Best Local Similarity 100.0%; Pred. No. 34;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 528 TGATAGGTAAATAATTAAAG 550  
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DB 553 TGATAGGTAAATAATTAAAG 575  
RESULT 11  
AX346523 6254 bp DNA linear PAT 01-FEB-2002  
LOCUS AX346523  
DEFINITION Sequence 1594 from Patent WO0200928.  
ACCESSION AX346523  
VERSION AX346523.1 GI:18494409  
KEYWORDS  
SOURCE synthetic construct  
ORGANISM artificial sequences.  
REFERENCE 1  
AUTHORS Olek,A., Piepenbrock,C. and Berlin,K.  
TITLE Diagnosis of diseases associated with the immune system  
JOURNAL Patent: WO 0200928-A 1594 03-JAN-2002;  
Epigenomics AG (DE)  
FEATURES  
source Location/Qualifiers  
1..6254  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="chemically treated genomic DNA (Homo sapiens)"  
ORIGIN  
Query Match 3.2%; Score 23; DB 6; Length 6254;  
Best Local Similarity 100.0%; Pred. No. 22;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 328 TATTAGATTGTTTAAATT 350  
|||||  
DB 957 TATTAGATTGTTTAAATT 979  
RESULT 12  
AF442957 14535 bp DNA circular INV 21-JAN-2002  
LOCUS AF442957  
DEFINITION Ostrinia nubilalis mitochondrion, complete genome.  
ACCESSION AF442957  
VERSION AF442957.1 GI:18252407  
KEYWORDS  
SOURCE mitochondrion Ostrinia nubilalis (European corn borer)  
ORGANISM Ostrinia nubilalis  
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;  
Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;  
Pyraloidea; Pyralidae; Pyraustinae; Ostrinia.  
REFERENCE 1 (bases 1 to 14535)  
AUTHORS Coates,B.S. and Hellmich,R.L.  
TITLE Near complete mitochondrial DNA sequence from Ostrinia nubilalis  
JOURNAL Unpublished  
2 (bases 1 to 14535)  
AUTHORS Coates,B.S. and Hellmich,R.L.  
TITLE Direct Submission  
JOURNAL Submitted (04-NOV-2001) Entomology, Iowa State University,  
USDA-ARS, Corn Insects & Crop Genetics Research Unit, 111 Genetics  
Lab, Ames, IA 50011, USA  
COMMENT  
Genome sequence lacks part of non-coding region.  
FEATURES  
source Location/Qualifiers  
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/organism="Ostrinia nubilalis"  
/organeller="mitochondrion"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:29057"  
/country="USA: Ames, IA"  
/note="biotype: bivoltine 2"  
1..32  
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/note="codons recognized: AUR"  
34..101  
/product="tRNA-Ile"  
/note="codons recognized: AUY"  
complement(102..170)  
/product="tRNA-Gln"  
/note="codons recognized: CAR"  
233..1234  
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233..1234  
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/protein\_id="AAL66238.1"  
/db\_xref="gi:18252408"  
/translation="MNSNGKFFFIFFSTLSSNSWFCGICLENLSTPIIN  
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 /db\_xref="GI:18252409"  
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 IGDQIINTIVTAHAFIMIEFMVPMIGGFQWMLVPLGAPPMAPPMNNMSWIL  
 PSLTLITSSIVENGAGTGVYPPISLNAHGSSVDLAIFSLHAGISSILGAIN  
 FITTILNNRINAGSFDQKPLEFVWSVGTALLILSLIPVLAGFTMLTDRNLSTFSD  
 PAGGGDPLLYOHLFWFEGHEPVILILPFGMISMLSQSGKKETFGSLGMYAMA  
 IGLGFVMAHKEFTVGKIDTRAYTSATMIIVTGIKIFSLATLHGQIVISPS  
 IIMSLEFVLETVGGTGVLANPSTIDIALHDYVVAHFVLSWGAVFALIGFTH  
 WYPLETGLSNIPYFLKIQFTNFIQVNLTFPOHFGLAGMPRVSDYDAVISMNI  
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 2973..3039  
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 /note="codons recognized: UUR"  
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 residues to the mRNA"  
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 /db\_xref="GI:18252410"  
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 3722..3792  
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 3792..3858  
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 /db\_xref="GI:18252411"  
 /translation="MPQMPINMMLSLFEFFIVFTIENINNYIFININNNYFPNN  
 KRNQIWRW"  
 4013..4687  
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 LSIPLMSTFMYGMINTQGMIFHMI PQGPTIIVPMVLIETISNIIPQGLAVR  
 LTANNIAGHLMTLLSGTQNSLSTYMIILVITIQILLILLESNAVIGSYVIAISTL  
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 4687..5478  
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 /translation="KKNFYSHPYHIVDYSPPWPTGALGVLTATGVWEFHNHNNL  
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 FPHSSLPNIEIGAMPNNIVYRNPQIPLNTLITLITSGVTVMAHAIHNNNSQ  
 MTQGLFLITLIGITFTLQNYEYLEAFPIAUSIYIGSTFMAIGFGLHVMIGTWFL  
 ICLRHINNQESNNHFGFEAAWYMHFVDVWVLELYISLYWQW"  
 5481..5547  
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 5551..5901  
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 /protein\_id="AAL66244.1"  
 /db\_xref="GI:18252414"  
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 KSSARIPSLHFLITWIFLIPDVEIALIFPMINLFKMTNFIWTKISFFPIIILIG  
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 LSIPLMSTFMYGMINTQGMIFHMI PQGPTIIVPMVLIETISNIIPQGLAVR  
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 FPHSSLPNIEIGAMPNNIVYRNPQIPLNTLITLITSGVTVMAHAIHNNNSQ  
 MTQGLFLITLIGITFTLQNYEYLEAFPIAUSIYIGSTFMAIGFGLHVMIGTWFL  
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 /db\_xref="GI:18252414"  
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 5912..5976  
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tRNA 5976. 6041  
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tRNA 6041. .6107  
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tRNA 6109. .6176  
/product="tRNA-Ser"  
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tRNA 6177. .6242  
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/product="tRNA-Phe"  
/note="codons recognized: UUY"  
gene complement(6294. .8030)  
/gene="ND5"  
complement(6294. .8030)  
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/product="NADH dehydrogenase subunit 5"  
/protein\_id="AA166245.1"  
/db\_xref="GI:18252415"  
/translation="MCGISFFFLFPPSLNFMVYFTIMNIIITLLEPISRNLSV  
IKSILLDMNSLLEFMFVSLISSVITYSKYSANSEINLRITLIVLVLSITLITIS  
PVSITLGGMDGLVSTCLVITYIOWIKSYNAQALFALSRIIDGLFIVLGVMMWG  
SNVLYLSTFNRNDYSNEMSIIMIIAATNSAQIFPSSMLPAMAAPTPVSAVHS  
TLVTAIGYLLIRNFLLIDMFIKILLISGLTFVAGISANVEFDKRTIALSTLSQ  
LGIMASILSMGPEDLAFPHLLTHAMEKALLPMAGVTHMMMDIODRFMGISNFP  
MTSLGAVSNNAALCGIPFAGFYSKDLLEWALSINLNFIEILYVYISGLMFSFR  
LTMVIMINDNLLSTYNLYDEDFIMKSMILLFNSVSGSFLIMLIESYPMLEDF  
NMGAVVYVSILOVFNCFYSNNNTSYNKLKATYQMSNLCIMFNPVLSVGLNFY  
FLNEQPMALNIDMGSSEMSQGFETMKRTSILNLESMONKITYLFSVIMMFWL  
IILMIFLYLNSL"  
complement(8046. .8112)

Query Match 3.2%; Score 23; DB 3; Length 14535;  
Best Local Similarity 100.0%; Pred. No. 19;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 475 GAAATTAATTAATAAATGA 497  
|||||  
DB 6388 GAAATTAATTAATAAATGA 6410

RESULT 13  
AF467260 14536 bp DNA circular INV 21-JAN-2002  
LOCUS Ostrinia furnacalis mitochondrion, complete genome.  
DEFINITION AF467260  
ACCESSION AF467260.1 GI:18252681  
VERSION  
KEYWORDS  
SOURCE  
ORGANISM  
mitochondrion Ostrinia furnacalis (Asian corn borer)  
Ostrinia furnacalis  
Eukaryote; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;  
Neoptera; Endopterygota; Lepidoptera; Glossata; Ditrysia;

REFERENCE  
Pyralidae; Pyralidae; Pyraustinae; Ostrinia.  
1 (bases 1 to 14536)  
AUTHORS Coates,B.S., Hellmich,R.L. and Lewis,L.C.  
TITLE Near complete mitochondrial genome of Ostrinia furnacalis  
JOURNAL Unpublished  
AUTHORS 2 (bases 1 to 14536)  
REFERENCE Coates,B.S., Hellmich,R.L. and Lewis,L.C.  
TITLE Direct Submission  
JOURNAL Submitted (10-JAN-2002) Corn Insects and Crop Genetics Research  
Unit, USDA-ARS, 111 Genetics Lab/Iowa State University, Ames, IA  
50011, USA

COMMENT  
FEATURES  
source  
Genome sequence lacks part of non-coding region.  
Location/Qualifiers  
1. 14536

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/organism="Ostrinia furnacalis"  
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/note="codons recognized: CAR"  
233. .1234  
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233. .1234  
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/protein\_id="AA166392.1"  
/db\_xref="GI:18252682"

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NSNITLSEASLAKFTFOALASINLFCIIIRWEMKRVFNNNTIMNNSLIMMG  
SAPPHWEPNIIIEGLSWNSFTLMWQKISPMILSYWNNFLILIIINSIIIGAG  
GLNOTSIRKIMTFSSINNLMSNMAMISENLMEYFPMSEFLISLCLESMINNEF  
INOLFEFNINYLKLSLILNLSLGGLPPEPGLPKWIIINENYKINLYFLITLIM  
SILLFYIRILYSSFEYNYLKLMIKIKIKNNENINMFLSFLISLGLTSFFPM"  
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/note="codons recognized: UGY"  
complement(1368. .1430)  
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1442. .2977  
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/product="cytochrome c oxidase subunit 1"  
/protein\_id="AAL66397.1"  
/db\_xref="GI:18252683"  
/translation="RKMLYSTNHKDIGLVEIFGWSGAVGTSLILRAELNGPGL  
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PSLTLISSIYVENAGTGMVTPPLSSNIAHGSSVDLAIFSLHAGISSIIGAN  
FTITINNRINGSPDQMLFWSVGTALLLLSLPVALATMLTDRNLNTSFD  
PAGGDDPLVQLHFWFGHEVITLIDFGQISTFISGSKETFGSLAKITAYAMA  
IGLGEVVAHMEFTVGMIDITRAYTSATMIIAVPTGKIFSWLATLHQVSPS  
ILMSLGEVFLFTVGLTGVLANSSIDIALHDTYVVAHFYVLSMGAVFAIIGFTI  
WYPLFTGLNLPYFLKIQFTFHEIGVNLTFPQHFLAGAPRVSDYDAVISMTI  
SSIGSYISLLAVMLILIIWESMHNQRIEFLSLNLTSSIEWQNLPPAHSYNELPIL  
SNF"  
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2973..3039  
/product="tRNA-Leu"  
/note="codons recognized: UUR"  
/gene="COI1"  
3040..3721  
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/note="TAA stop codon is completed by the addition of 3' A  
residues to the mRNA"  
/codon\_start=1  
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/transl\_table=5  
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/protein\_id="AAL66394.1"  
/db\_xref="GI:18252684"  
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LEFNKYINRFLGQMLIWTIIPALIFIALPSLRLVLDLNRPLTLKSGH  
QWWSYEYSDENNIEFSDSYTPNENKNNRNLLEYDNRITLPMNQIOIIVTATDVI  
HSMTPLSGVVDANPGRILNQTNFIRNPGLFGQCEICGANSMPYVESISIN  
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3792..3861  
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/note="codons recognized: GAY"  
3861..4022  
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/protein\_id="AAL66395.1"  
/db\_xref="GI:18252685"  
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KKNQIWMW"  
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4016..4690  
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/protein\_id="AAL66396.1"  
/db\_xref="GI:18252686"  
/translation="MATNLESLFDPSTNLFNLINMISTIIIGLMEIPYSFVLIPNRY  
IFNMFILNLIKHEKRLNGNSGTIFISMPETLNNPILGFPYIFTSLSLMS  
LSISLPKMSFEFGMLANTQRMFTNHI PQGPTTIDRPNVLETISNIIPRGILAVR  
LTANMAGILMTLLSGTNSLSTMIILVITIIQLLILLESANVATOSVYALISTL  
YSSVNV"  
gene  
4690..5481  
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/db\_xref="GI:18252687"  
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WTQGLFTIILIGIYFTFLAYEYLEAPFTIADSIYGSTFMAFGHGLHVI GTMEL  
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/protein\_id="AAL66398.1"  
/db\_xref="GI:18252688"  
/translation="MILISYISIIIMISNIMMFLSIILSKSESDREKNSPECGFD  
PKSARIPSLHFLIMFLFEDVETALFPMINLFRMTNFIWTXISFFIILILI  
GLFENQMLNMTK"  
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5916..5982  
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5982..6044  
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/note="codons recognized: CGN"  
6046..6112  
/product="tRNA-Asn"  
/note="codons recognized: AAY"  
6114..6181  
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/note="codons recognized: AGN"  
6182..6247  
/product="tRNA-Glu"  
/note="codons recognized: GAR"  
complement(6248..6313)  
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TLVTAGIYLLIRENILLIDMFESKILLISGLTFPAAGISANVEFDKRIALSTVQ  
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Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 475 GAAATTAATTAATTAATGA 497  
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DB 6393 GAAATTAATTAATTAATGA 6415

RESULT 14  
AC122478 135772 bp DNA linear ROD 13-NOV-2003  
LOCUS  
DEFINITION Mus musculus BAC clone RP24-337D11 from chromosome 6, complete  
sequence.  
AC122478  
VERSION AC122478.3 GI:27877424  
KEYWORDS  
SOURCE HTG.  
MUS MUSCULUS (house mouse)  
ORGANISM  
Mus musculus  
Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
REFERENCE  
AUTHORS  
1 (bases 1 to 135772)  
TITLE The sequence of Mus musculus BAC clone RP24-337D11  
JOURNAL  
REFERENCE  
AUTHORS  
2 (bases 1 to 135772)  
TITLE Unpublished (2001)  
AUTHORS  
Wilson, R.  
TITLE Sequencing of Mus musculus  
JOURNAL  
REFERENCE  
AUTHORS  
3 (bases 1 to 135772)  
TITLE Unpublished (2001)  
AUTHORS  
McPherson, J.D. and Waterston, R.H.  
TITLE Direct Submission  
JOURNAL  
REFERENCE  
AUTHORS  
4 (bases 1 to 135772)  
TITLE Submitted (23-MAY-2002) Genome Sequencing Center, 4444 Forest Park  
Parkway, St. Louis, MO 63108, USA  
AUTHORS  
McPherson, J.D. and Waterston, R.H.

TITLE  
JOURNAL  
REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
REFERENCE  
AUTHORS  
TITLE  
JOURNAL  
COMMENT

Direct Submission  
Submitted (22-JUN-2002) Genome Sequencing Center, 4444 Forest Park  
Parkway, St. Louis, MO 63108, USA  
5 (bases 1 to 135772)  
McPherson, J.D. and Waterston, R.H.  
Direct Submission  
Submitted (23-JUN-2003) Genome Sequencing Center, 4444 Forest Park  
Parkway, St. Louis, MO 63108, USA  
6 (bases 1 to 135772)  
Wilson, R.  
Direct Submission  
Submitted (13-NOV-2003) Department of Genetics, Washington  
University, 4444 Forest Park Avenue, St. Louis, Missouri 63108, USA  
On Jan 23, 2003 this sequence version replaced gi:21539177.  
----- Genome Center  
Center: Washington University Genome Sequencing Center  
Center code: WUGSC  
Web site: http://genome.wustl.edu  
Contact: submissions@wustl.edu  
----- Summary Statistics  
Center project name: M\_BB0337D11  
-----

NOTICE: This sequence may not represent the entire insert of this  
clone. It may be shorter because we only sequence overlapping  
clone sections once, or longer because we provide a small overlap  
between neighboring data submissions.

This sequence was finished as follows unless otherwise noted:  
all regions were double stranded, sequenced with an alternate  
chemistry, or covered by high quality data (i.e., phred quality >=  
30); an attempt was made to resolve all sequencing problems, such  
as compressions and repeats; all regions were covered by sequence  
from more than one subclone; and the assembly was confirmed by  
restriction digest.

MAPPING INFORMATION:  
Mapping information for this clone was provided by Dr. Was Warren,  
Department of Genetics, Washington University, St. Louis MO. For  
additional information about the map position of this sequence, see  
http://genome.wustl.edu

SOURCE INFORMATION:  
The RPCI-24 BAC Library has been constructed by Pieter de Jong and  
coworkers (http://www.choil.org) from male C57BL/6J mouse spleen  
and/or brain genomic DNA. The clone and detailed information can be  
obtained from Pieter de Jong and coworkers at http://www.choil.org

NEIGHBORING SEQUENCE INFORMATION:  
This sequence is the entire insert of the clone.  
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Query Match 3.2% Score 23; DB 10; Length 135772;  
Best Local Similarity 100.0%; Pred. No. 12;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 532 AACGTAAATAATTAAGGTAA 554  
Db 98676 AACGTAAATAATTAAGGTAA 98698

RESULT 15  
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LOCUS AC105750 Homo sapiens chromosome 3 clone RP11-776K4, complete sequence.  
ACCESSION AC105750  
VERSION AC105750.2 GI:21166210  
KEYWORDS HTG.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens

REFERENCE  
AUTHORS Kaul,R.K., Olson,M.V., Zhou,Y., James,R.A., Rouse,G., Wu,Z.,  
Scaphimachak,C., Phelps,K.A., Buckley,D., Raymond,C. and  
Haugen,E.D.  
1 (bases 1 to 166478)

TITLE Direct Submission  
JOURNAL Unpublished  
REFERENCE 2 (bases 1 to 166478)  
AUTHORS Kaul,R.K., Olson,M.V., Raymond,C. and Haugen,E.D.  
TITLE Direct Submission  
JOURNAL Submitted (09-JAN-2002) Genome Center, University of Washington,  
Box 352145, Seattle, WA 98195, USA  
3 (bases 1 to 166478)

REFERENCE  
AUTHORS Kaul,R.K., Olson,M.V., Zhou,Y., James,R.A., Rouse,G., Wu,Z.,  
Scaphimachak,C., Phelps,K.A., Buckley,D., Raymond,C. and  
Haugen,E.D.  
TITLE Direct Submission  
JOURNAL Submitted (24-MAY-2002) Genome Center, University of Washington,  
Box 352145, Seattle, WA 98195, USA  
On May 24, 2002 this sequence version replaced gi:18093011.

----- Genome Center  
Center: University of Washington Genome Center  
Center Code: UWGC  
Web site: http://www.genome.washington.edu  
Contact: uwgchga@u.washington.edu  
----- Project Information  
Center project name: chr-3  
Center clone name: RP11-776K4 (bc0559)

----- Summary Statistics  
Sequencing vector: Plasmid; 92% of reads  
Sequencing vector: Plasmid; 108752; 8% of reads  
Chemistry: Dye-terminator EF; 65% of reads  
Chemistry: Dye-terminator Big Dye; 35% of reads

Assembly program: Phrap; version 0.990319  
Consensus quality: 166291 bases at least Q40  
Consensus quality: 166469 bases at least Q30  
Consensus quality: 166478 bases at least Q20  
Insert size: 166478; sum-of-contigs  
Quality coverage: 8.3k in Q20 bases; sum-of-contigs

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Overlapping Sequences:  
5': Mapping in progress  
3': RP11-45415 (UWGC:bc0430) AC105933

Sequence Quality Assessment:  
This entry has been annotated with sequence quality estimates computed by the Phrap assembly program. All manually edited bases have been reduced to quality zero. Quality levels above 40 are expected to have less than 1 error in 10,000 bp. Base-by-base quality values are not generally visible from the Genbank flat file format but are available as part of this entry's ASN.1 file.

This sequence was finished as follows unless otherwise noted:  
all regions were either double-stranded or sequenced with an alternate chemistry or covered by high quality data (i.e., Phred quality >= 30); an attempt was made to resolve all sequencing problems, such as compressions and repeats; all regions were covered by at least one plasmid subclone or more than one M13 subclone; and the assembly was confirmed by restriction digest.

Sequence Validation:  
This sequence has been validated by Multiple Complete Digest fingerprinting. Comparison of the experimentally derived digest fragments with sequence-predicted fragments is given below. The electronically-digested sequence consists of both insert and vector, in order to accurately represent the entire circular BAC. Small fragments below a variable cutoff (approximately 400-800 bp) are not resolved in the fingerprint and hence do not appear in the table. There are no significant remaining discrepancies between the experimental and predicted values. Uniquely ordered fragments are separated by dashed lines.

EcoRI		HindIII		BglII	
SeqDerMap	FingerPrint	SeqDerMap	FingerPrint	SeqDerMap	FingerPrint
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8696	8685	3818	3753	2920	2912
-----	-----	-----	-----	-----	-----
6	<800	6382	6487	2067	2109
-----	-----	-----	-----	-----	-----
739	<800	512	<800	9429	9669
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5224	5154	449	<800	1306	1267
-----	-----	-----	-----	-----	-----
2145	2232	3728	3753	749	746
-----	-----	-----	-----	-----	-----
1840	1803	1154	1210	3914	4005

1780	1803	1737	1744	10546	10528	1566	1528	4732	4691	165	<800
3529	3501	2366	2330	2306	2309	3021	3073	54	<800	2148	2109
3496	3501	5486	5496	3696	3646	5900	5891	57	<800	123	<800
788	<800	1506	1543	4478	4365	178	<800	97	<800	4544	4365
4920	5154	749	763	8022	7999	1223	1207	3356	3478	2870	2912
581	<800	946	952	80	<800	1038	1036	1219	1210	1365	1351
526	<800	408	<800	913	915	3747	3720	247	<800	1060	990
284	<800	254	<800	6288	6265	2167	2232	2268	2330	2799	2737
1853	1803	3660	3753	1090	1080	448	<800	998	952	135	<800
496	<800	2283	2330	2565	2556	4511	4498	4814	4691	4143	4005
102	<800	1124	1101	6579	6492	4557	4498	3206	3321	3833	3817
313	<800	4364	4338	266	<800	5183	5154	2735	2735	21	<800
85	<800	1668	1647	4031	4005	2247	2232	752	<800	4769	4682
1361	1336	150	<800	2682	2737	926	942	2575	2735	5224	5128
1825	1803	3400	3478	2359	2309	7611	7547	3264	3321	3745	3646
12829	12923	2383	2330	2177	2109	101	<800	2766	2735	3877	3817
4548	4498	706	<800	975	990	1208	1207	1478	1429	983	990
1214	1207	787	<800	583	<800	1258	1207	1923	1874	11189	11246
2488	2553	293	<800	1796	1791	5815	5891	79	<800	6798	6823
774	<800	8394	8412	78	<800	392	<800	847	843	2675	2737
5997	5891	686	<800	1592	1574	2227	2232	2995	3082	4594	4365
3438	3501	581	<800	4358	4365	941	942	5728	5496		
3725	3720	1960	1966	1810	1791	4834	4823	5572	5496		
563	<800	3888	3753	7137	7042						
955	942	10610	10702	998	990						
1270	1207	621	<800	1941	1929						
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623	<800	202	<800	8061	7999						

Query Match 3.2% Score 23; DB 9; Length 166478;  
 Best Local Similarity 100.0%; Pred. No. 12;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 OY 28 AATTAATTAATAAACTCTGGAAA 50  
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 DB 35273 AATTAATTAATAAACTCTGGAAA 35251  
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Search completed: October 15, 2004, 03:28:04  
 Job time : 3746.62 secs



OM nucleotide - nucleotide search, using sw model

Run on: October 14, 2004, 18:55:29 ; Search time 476.318 Seconds  
(without alignments)  
6368.040 Million cell updates/sec

Title: US-09-407-804A-4

Perfect score: 714  
Sequence: 1 atgacgcataatagagaaa.....agatccctgataagaatga 714

Scoring table: OLIGO\_NUC  
Gapop 60.0 , Gapext 60.0

Searched: 3373863 seqs, 2124099041 residues

Word size: 0

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: listing first 1000 summaries

Database : N\_Geneseq\_29Jan04:\*

1: geneseqn1980s:\*

2: geneseqn1990s:\*

3: geneseqn2000s:\*

4: geneseqn2001as:\*

5: geneseqn2001bs:\*

6: geneseqn2002as:\*

7: geneseqn2003as:\*

8: geneseqn2003bs:\*

9: geneseqn2003cs:\*

10: geneseqn2004s:\*

Prod. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	714	100.0	714	3	AA68248 Bacterioph
2	714	100.0	41708	3	AA68247 Bacterioph
3	714	100.0	41708	3	AA68247 Bacterioph
4	23	3.2	656	6	ABQ30760 Complete
5	23	3.2	656	6	ABQ30760 Complete
6	23	3.2	712	6	ABQ38659 Oligonuc
7	23	3.2	712	6	ABQ38658 Oligonuc

8	23	3.2	6254	6	AB133621 Human imm
9	22	3.1	6075	6	AB133550 Human imm
10	21	2.9	615	3	AAA43336 Xenopus s
11	21	2.9	2000	6	AB216393 Arabidops
12	21	2.9	5156	2	AA790505 Arabidops
13	21	2.9	5156	2	AA790505 Arabidops
14	21	2.9	5156	3	AA76122 Arabidops
15	21	2.9	6050	6	AB134011 Human imm
16	21	2.9	24389	4	AB129006 Drosophila
17	20	2.8	220	4	ABK42324 Genomic s
18	20	2.8	220	4	AAK85033 Human imm
19	20	2.8	220	4	AAK85031 Human imm
20	20	2.8	220	6	ABD60480 Connectiv
21	20	2.8	552	6	ABN89005 Human pro
22	20	2.8	583	6	ABQ47538 Oligonuc
23	20	2.8	583	6	ABQ47539 Oligonuc
24	20	2.8	695	3	AA713887 Aspergill
25	20	2.8	1271	2	AAK20327 Borrelia
26	20	2.8	1409	6	AB216176 Arabidops
27	20	2.8	2861	7	ACC48533 Stephyloc
28	20	2.8	3604	2	AAK13417 Enterococ
29	20	2.8	3604	6	ABN99212 Enterococ
30	20	2.8	4530	4	AB111726 Drosophila
31	20	2.8	5344	4	AB111976 Drosophila
32	20	2.8	6067	6	AB133185 Human imm
33	20	2.8	6067	6	AB192233 Chemical1
34	20	2.8	6067	6	AB192233 Chemical1
35	20	2.8	6134	6	AB133182 Human imm
36	20	2.8	7187	6	ABN80037 Human che
37	20	2.8	7203	6	AB134051 Human imm
38	20	2.8	7631	6	AB132860 Human imm
39	20	2.8	8883	4	AA545761 Aas46761 Tumour su
40	20	2.8	11598	4	AA106652 Human rep
41	20	2.8	11598	5	AA540735 DNA encod
42	20	2.8	11600	4	AA106653 Human rep
43	20	2.8	11600	5	AA540736 DNA encod
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45	20	2.8	14752	2	AAK20256 Borrelia
46	20	2.8	15109	2	AAV74355 Stephyloc
47	20	2.8	15121	6	ABN80239 Human che
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55	19	2.7	807	6	ABN90764 Stephyloc
56	19	2.7	1220	6	AB157808 Murine AB
57	19	2.7	1869	4	AA105407 Human rep
58	19	2.7	2041	3	AA664194 Nucleotid
59	19	2.7	2291	6	AB157807 Murine AB
60	19	2.7	2682	2	AAV47539 Human ace
61	19	2.7	2682	2	AAV83610 Acetyl-co
62	19	2.7	2682	9	ADC01889 Human cIN
63	19	2.7	3424	5	ABV22643 Human pro
64	19	2.7	3424	5	ABV28466 Human pro

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c 68	19	2.7	4720	4	AB116822	Ab116822	Drosophila	124	18	2.5	382	5	ABV56122	ABV56122 Human pro
c 69	19	2.7	4849	4	AB108580	Ab108580	Drosophila	125	18	2.5	385	7	ABR22766	ABR22766 Breast ca
c 70	19	2.7	5070	6	AB132800	Ab132800	Human lmm	c 126	18	2.5	400	5	ABV39012	ABV39012 Human pro
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c 72	19	2.7	5457	6	AB133131	Ab133131	Human lmm	c 128	18	2.5	425	4	AA189686	AA189686 Human pol
c 73	19	2.7	6089	4	AA546579	AA546579	Tumour su	c 129	18	2.5	429	5	ABV52842	ABV52842 Human pro
c 74	19	2.7	6089	4	AB133836	Ab133836	Human lmm	c 130	18	2.5	439	6	ABV61902	ABV61902 Human can
c 75	19	2.7	6195	6	AB132590	Ab132590	Human lmm	c 131	18	2.5	443	5	ABV05822	ABV05822 Human can
c 76	19	2.7	6201	6	AB132496	Ab132496	Human lmm	c 132	18	2.5	456	7	AD557720	AD557720 BAC fragm
c 77	19	2.7	6453	6	AB067164	AB067164	Tumour su	c 133	18	2.5	456	7	AD557719	AD557719 BAC fragm
c 78	19	2.7	7069	4	AA546654	AA546654	Tumour su	c 134	18	2.5	459	6	AB193688	AB193688 Human sec
c 79	19	2.7	7069	6	AB133353	Ab133353	Human lmm	c 135	18	2.5	464	5	ABV53314	ABV53314 Human pro
c 80	19	2.7	7069	6	AB131319	Ab131319	Signal tr	c 136	18	2.5	469	7	ABV74547	ABV74547 Human pro
c 81	19	2.7	7069	6	AB170292	Ab170292	Chemical	c 137	18	2.5	477	7	AC828748	AC828748 Human cDN
c 82	19	2.7	7069	6	AB06984	AB06984	Human gen	c 138	18	2.5	479	7	AD557720	AD557720 BAC fragm
c 83	19	2.7	7321	6	ABK31424	AbK31424	Signal tr	c 139	18	2.5	479	7	AD557720	AD557720 BAC fragm
c 84	19	2.7	7321	6	AB170385	Ab170385	Chemical	c 140	18	2.5	484	8	ACH30458	ACH30458 Human sec
c 85	19	2.7	7321	6	AB170385	Ab170385	Chemical	c 141	18	2.5	488	8	ACH30458	ACH30458 Human tes
c 86	19	2.7	7922	6	ABN80086	ABN80086	Human gen	c 142	18	2.5	491	5	ABV02007	ABV02007 Human pro
c 87	19	2.7	8196	6	AB133092	Ab133092	Human che	c 143	18	2.5	502	4	AAK80308	AAK80308 Human lmm
c 88	19	2.7	8196	6	AB134538	Ab134538	Human met	c 144	18	2.5	511	6	ABQ48124	ABQ48124 Oligonuc
c 89	19	2.7	8196	6	AB170261	Ab170261	Chemical	c 145	18	2.5	511	6	ABQ48125	ABQ48125 Oligonuc
c 90	19	2.7	8201	6	AB132306	Ab132306	Human lmm	c 146	18	2.5	524	4	AA1250914	AA1250914 Human bre
c 91	19	2.7	8201	6	AB154327	Ab154327	Chemical	c 147	18	2.5	524	4	AA1250914	AA1250914 Human bre
c 92	19	2.7	8234	6	AB133649	Ab133649	Human lmm	c 148	18	2.5	527	5	ABV21263	ABV21263 Human pro
c 93	19	2.7	8234	6	AB133649	Ab133649	Human lmm	c 149	18	2.5	527	5	ABV23697	ABV23697 Human pro
c 94	19	2.7	8905	2	AAK20263	AAK20263	DNA trans	c 150	18	2.5	528	6	ABQ45568	ABQ45568 Oligonuc
c 95	19	2.7	9238	6	ABK28366	ABK28366	Human met	c 151	18	2.5	528	6	ABQ45568	ABQ45568 Oligonuc
c 96	19	2.7	9254	4	AD854259	AD854259	Prostate	c 152	18	2.5	528	6	ABQ45568	ABQ45568 Oligonuc
c 97	19	2.7	10241	9	AB110576	Ab110576	Drosophila	c 153	18	2.5	530	5	ABV52716	ABV52716 Human pro
c 98	19	2.7	11729	6	AB132895	Ab132895	Human lmm	c 154	18	2.5	545	8	ACH40746	ACH40746 Human foe
c 99	19	2.7	12007	6	AB132717	Ab132717	Human lmm	c 155	18	2.5	561	8	ACH25146	ACH25146 Human edu
c 100	19	2.7	12465	4	AA545326	AA545326	Chemical	c 156	18	2.5	573	2	AAK61720	AAK61720 B. burgdo
c 101	19	2.7	12465	6	AB132634	Ab132634	Human lmm	c 157	18	2.5	576	5	ABV38953	ABV38953 Human pro
c 102	19	2.7	15674	6	AB132362	Ab132362	Human lmm	c 158	18	2.5	576	5	ABV44740	ABV44740 Human pro
c 103	19	2.7	15674	6	AB134476	Ab134476	Human met	c 159	18	2.5	576	5	ABV39074	ABV39074 Human pro
c 104	19	2.7	15674	6	AB170513	Ab170513	Chemical	c 160	18	2.5	583	5	ABV32322	ABV32322 Human pro
c 105	19	2.7	15767	6	AB133207	Ab133207	Human lmm	c 161	18	2.5	586	5	ABV54913	ABV54913 Human pro
c 106	19	2.7	15767	6	AB134553	Ab134553	Human met	c 162	18	2.5	587	4	AAK83844	AAK83844 Human lmm
c 107	19	2.7	18218	6	AB133948	Ab133948	Human lmm	c 163	18	2.5	606	2	AAK61719	AAK61719 B. burgdo
c 108	19	2.7	23024	4	AAE25499	AAE25499	Nucleoid	c 164	18	2.5	607	5	ABV51421	ABV51421 Human pro
c 109	19	2.7	24099	4	AA106944	AA106944	Human rep	c 165	18	2.5	609	5	ABV14991	ABV14991 Human pro
c 110	19	2.7	92407	4	AAE28549	AAE28549	Genomic f	c 166	18	2.5	619	5	ABV11176	ABV11176 Human pro
c 111	19	2.7	110000	6	ABA03041_14	ABA03041_14	Continuation (15 o	c 167	18	2.5	623	3	AAK52778	AAK52778 Arabidops
c 112	19	2.7	117574	6	AA145288	AA145288	Human KCN	c 168	18	2.5	631	5	ABV41253	ABV41253 Human pro
c 113	18	2.5	139	3	AA14458	AA14458	Human amy	c 169	18	2.5	631	5	ABV44798	ABV44798 Human pro
c 114	18	2.5	172	3	AAA41833	AAA41833	Human sec	c 170	18	2.5	631	5	ABV44860	ABV44860 Human pro
c 115	18	2.5	201	4	AA112029	AA112029	Human bre	c 171	18	2.5	658	7	ACQ94504	ACQ94504 Human col
c 116	18	2.5	213	5	ABV19566	ABV19566	Human pro	c 172	18	2.5	675	6	ABQ45851	ABQ45851 Oligonuc
c 117	18	2.5	223	3	AAK24831	AAK24831	Human sec	c 173	18	2.5	691	6	ABQ45850	ABQ45850 Oligonuc
c 118	18	2.5	240	5	ABV58851	ABV58851	Human pro	c 174	18	2.5	694	6	ABQ42477	ABQ42477 Oligonuc
c 119	18	2.5	270	9	AD852380	AD852380	Primary r	c 175	18	2.5	694	6	ABQ42476	ABQ42476 Oligonuc
c 120	18	2.5	274	5	ABV58263	ABV58263	Human pro	c 176	18	2.5	722	5	ABV17698	ABV17698 Human pro
c 121	18	2.5	277	5	ABV57365	ABV57365	Human pro	c 177	18	2.5	742	4	AAK72035	AAK72035 Human lmm

c 179	18	2.5	752	6	ABQ27366	Abq27366	Oligonucle	c 236	18	2.5	3322	8	ABT43735	Abt43735	Molecule
c 180	18	2.5	752	6	ABQ27367	Abq27367	Oligonucle	c 237	18	2.5	3343	6	ABL34136	AbL34136	Human imm
c 181	18	2.5	813	3	AAc52520	AAc52520	Arabiidops	c 238	18	2.5	3353	1	AAO81234	AAO81234	Sequence
c 182	18	2.5	816	3	AAc08436	AAc08436	Fusaricium	c 239	18	2.5	3353	2	AAO04496	AAO04496	Sequence
c 183	18	2.5	834	5	ABV14866	Abv14866	Human pro	c 240	18	2.5	3353	2	AAO14097	AAO14097	Amyloid p
c 184	18	2.5	884	4	AAI13933	AAI13933	Human bre	c 241	18	2.5	3353	2	AAO54258	AAO54258	Amyloid p
c 185	18	2.5	885	7	ACA34528	Ac34528	Prokaryot	c 242	18	2.5	3353	3	AAZ49951	AAZ49951	Human bet
c 186	18	2.5	931	5	ABV14926	Abv14926	Human pro	c 243	18	2.5	3354	2	AAZ32219	AAZ32219	Human bet
c 187	18	2.5	950	5	ABV60782	Abv60782	Human pro	c 244	18	2.5	3354	3	AAZ89477	AAZ89477	Human APP
c 188	18	2.5	1002	6	ABQ22125	Abq22125	Oligonucle	c 245	18	2.5	3354	7	ACC43142	ACC43142	Nucleotid
c 189	18	2.5	1002	7	ACA27957	ACA27957	Prokaryot	c 246	18	2.5	3354	9	ADB33518	ADB33518	Human APP
c 190	18	2.5	1002	7	ACA27957	ACA27957	Prokaryot	c 247	18	2.5	3410	4	ABL24778	ABL24778	Human APP
c 191	18	2.5	1003	6	ABQ39670	Abq39670	Oligonucle	c 248	18	2.5	3435	7	ABK63219	ABK63219	Human CDV
c 192	18	2.5	1003	6	ABQ39671	Abq39671	Oligonucle	c 249	18	2.5	3447	4	ABL09464	ABL09464	Drosophil
c 193	18	2.5	1168	2	AAI42750	AAI42750	Canarypox	c 250	18	2.5	3495	7	ACC68979	ACC68979	Human neu
c 194	18	2.5	1197	6	ABQ41306	Abq41306	Oligonucle	c 251	18	2.5	3520	2	AAV77504	AAV77504	Human bet
c 195	18	2.5	1197	6	ABQ41307	Abq41307	Oligonucle	c 252	18	2.5	3521	2	AAI47554	AAI47554	H6 promot
c 196	18	2.5	1546	5	ABV21166	Abv21166	Human pro	c 253	18	2.5	3537	2	AAI69981	AAI69981	FLPV gpI
c 197	18	2.5	1546	5	ABV26980	Abv26980	Human pro	c 254	18	2.5	3579	8	ABZ77538	ABZ77538	Nucleotid
c 198	18	2.5	1586	6	ABV75415	Abv75415	Hexokinase	c 255	18	2.5	3585	5	AA583273	AA583273	DNA encod
c 199	18	2.5	1614	2	AAQ67875	AAQ67875	C6 Insert	c 256	18	2.5	3609	4	AAE28320	AAE28320	pJP107 do
c 200	18	2.5	1615	2	AAI04704	AAI04704	ALVAC C6	c 257	18	2.5	3621	5	ABV29298	ABV29298	Human pro
c 201	18	2.5	1615	2	AAI01460	AAI01460	ALVAC C6	c 258	18	2.5	3701	4	AAE55027	AAE55027	Nucleotid
c 202	18	2.5	1615	2	AAV26972	AAV26972	Canarypox	c 259	18	2.5	3701	4	AAE75820	AAE75820	ALVAC DNA
c 203	18	2.5	1615	2	AAZ08495	AAZ08495	Nucleotid	c 260	18	2.5	3701	4	AAE28310	AAE28310	Canarypox
c 204	18	2.5	1623	3	AAE22421	AAE22421	Human sec	c 261	18	2.5	3701	6	ABK15631	ABK15631	Canarypox
c 205	18	2.5	1680	9	ADG56569	ADG56569	Rat gene	c 262	18	2.5	3706	2	AAI69995	AAI69995	Canarypox
c 206	18	2.5	1721	4	AAH45680	AAH45680	Human rib	c 263	18	2.5	3706	2	AAI47553	AAI47553	Canarypox
c 207	18	2.5	1801	3	AAAC6122	AAAC6122	Arabiidops	c 264	18	2.5	3882	4	ABL05988	ABL05988	Drosophil
c 208	18	2.5	2000	6	ABE217169	ABe217169	Arabiidops	c 265	18	2.5	4174	4	ABL28076	ABL28076	Drosophil
c 209	18	2.5	2000	6	ABE15598	ABe15598	Arabiidops	c 266	18	2.5	4191	7	ACH31159	ACH31159	Prokaryot
c 210	18	2.5	2204	6	ABK15638	ABk15638	Canarypox	c 267	18	2.5	4434	2	AAV58245	AAV58245	ALVAC C6
c 211	18	2.5	2314	6	ABK34967	ABk34967	Human CDV	c 268	18	2.5	4434	2	AAV58245	AAV58245	K3L and E
c 212	18	2.5	2339	7	ABK15636	ABk15636	Canarypox	c 269	18	2.5	4434	2	AAV60253	AAV60253	ALVAC C6
c 213	18	2.5	2361	7	ACA48407	ACA48407	Prokaryot	c 270	18	2.5	4434	2	AAV60248	AAV60248	ALVAC C6
c 214	18	2.5	2369	6	ABK15634	ABk15634	Canarypox	c 271	18	2.5	4434	6	AAI71985	AAI71985	E3L and F
c 215	18	2.5	2417	6	ABK15635	ABk15635	Canarypox	c 272	18	2.5	4753	6	ABQ67117	ABQ67117	Human ang
c 216	18	2.5	2430	4	AAH17380	AAH17380	Human CDV	c 273	18	2.5	4909	2	AAI47538	AAI47538	42K promot
c 217	18	2.5	2477	4	ABL08980	ABL08980	Drosophil	c 274	18	2.5	5181	6	ABL34103	ABL34103	Human imm
c 218	18	2.5	2486	3	AAV97037	AAV97037	Nucleotid	c 275	18	2.5	5181	6	ABL70443	ABL70443	Chemical
c 219	18	2.5	2520	4	AAE75827	AAE75827	Plasmid P	c 276	18	2.5	5348	4	ABL02884	ABL02884	Chemical
c 220	18	2.5	2520	4	AAE28317	AAE28317	pJP102 do	c 277	18	2.5	5348	4	ABL34204	ABL34204	Human imm
c 221	18	2.5	2567	6	ABK15632	ABk15632	Canarypox	c 278	18	2.5	5397	6	ABL34204	ABL34204	Human imm
c 222	18	2.5	2581	2	AAO13077	AAO13077	erica gene	c 279	18	2.5	5447	4	AA546757	AA546757	Tumour su
c 223	18	2.5	2615	6	ABK15633	ABk15633	Canarypox	c 280	18	2.5	5493	6	ABL34109	ABL34109	Human imm
c 224	18	2.5	2731	2	AAZ77554	AAZ77554	Human ova	c 281	18	2.5	5525	6	AA561386	AA561386	Human gen
c 225	18	2.5	2769	4	AAE75830	AAE75830	Plasmid P	c 282	18	2.5	5525	6	ABK33930	ABK33930	Human DNA
c 226	18	2.5	3022	4	AA536553	AA536553	Human car	c 283	18	2.5	5525	7	ADZ20343	ADZ20343	Prostate
c 227	18	2.5	3022	9	ADG47247	ADG47247	Human car	c 284	18	2.5	5530	6	ABK31443	ABK31443	Human fen
c 228	18	2.5	3063	2	AAO67874	AAO67874	Canarypox	c 285	18	2.5	5530	6	ABK31443	ABK31443	Human fen
c 229	18	2.5	3063	2	AAO68490	AAO68490	Nucleotid	c 286	18	2.5	5571	4	AA546483	AA546483	Signal tr
c 230	18	2.5	3085	6	ABK15637	ABk15637	Canarypox	c 287	18	2.5	5571	6	ABK31346	ABK31346	Signal tr
c 231	18	2.5	3118	4	ABL24780	ABL24780	Drosophil	c 288	18	2.5	5571	6	ABI70307	ABI70307	Chemical
c 232	18	2.5	3129	4	AA562688	AA562688	Human sec	c 289	18	2.5	5571	6	AA561241	AA561241	Human gen
c 233	18	2.5	3138	2	AAO11712	AAO11712	Shuttle v	c 290	18	2.5	5825	6	ABK28381	ABK28381	DNA trans
c 234	18	2.5	3238	5	AA583275	AA583275	DNA encod	c 291	18	2.5	5883	6	ABL33732	ABL33732	Human imm
c 235	18	2.5	3302	4	ABL19744	ABL19744	Drosophil	c 292	18	2.5	5898	4	AA545471	AA545471	Chemical

c 293	18	2.5	5898	ABL33940	Ab133940 Human imm	c 350	18	2.5	6777	9	ADB47449	Abd47449 Human cDN
c 294	18	2.5	5898	ABK28329	Abk28329 DNA trans	c 351	18	2.5	6852	6	ABL70311	Ab170311 Chemt cell
c 295	18	2.5	5938	ABN80218	Abn80218 Human che	c 352	18	2.5	6852	6	ABK61249	Aas61249 Human gen
c 296	18	2.5	5971	ABL32383	Ab132383 Human imm	c 353	18	2.5	6917	6	ABL34234	Ab134234 Human imm
c 297	18	2.5	6032	7	ABK77169 DNA seque	c 354	18	2.5	6923	6	ABK31296	Abk31296 Signal tr
c 298	18	2.5	6042	6	ABO67042	c 355	18	2.5	6923	6	ABL70275	Ab170275 Chemt cell
c 299	18	2.5	6074	6	ABK33990	c 356	18	2.5	6923	6	AAS61198	Aas61198 Human che
c 300	18	2.5	6074	7	ADK20378	c 357	18	2.5	6954	6	ABL33390	Ab133390 Human imm
c 301	18	2.5	6074	7	ADK64185	c 358	18	2.5	7004	6	AAS45412	Aas45412 Chemt cell
c 302	18	2.5	6079	6	ABL32258	c 359	18	2.5	7004	6	ABK28265	Abk28265 DNA trans
c 303	18	2.5	6090	2	AAT69977	c 360	18	2.5	7312	6	ABL33814	Ab133814 Human imm
c 304	18	2.5	6109	6	ABN80149	c 361	18	2.5	7312	6	ABL70401	Ab170401 Chemt cell
c 305	18	2.5	6123	6	ABL33037	c 362	18	2.5	7352	6	AAS61349	Aas61349 Human gen
c 306	18	2.5	6144	2	AAT69976	c 363	18	2.5	7352	6	ABL32370	Ab132370 Human imm
c 307	18	2.5	6154	6	ABL33304	c 364	18	2.5	7508	6	ABK31207	Abk31207 Signal tr
c 308	18	2.5	6154	6	ABL33305	c 365	18	2.5	7634	6	ABL31307	Ab131307 Human imm
c 309	18	2.5	6182	6	ABL34015	c 366	18	2.5	7644	6	ABL32530	Ab132530 Human imm
c 310	18	2.5	6191	6	ABL33216	c 367	18	2.5	7990	6	ABL32159	Ab132159 Human imm
c 311	18	2.5	6191	6	ABL33106	c 368	18	2.5	7990	6	ABL54308	Ab154308 Chemt cell
c 312	18	2.5	6191	6	ABL70281	c 369	18	2.5	8044	4	AAS46626	Aas46626 Tumour su
c 313	18	2.5	6191	6	ABN80160	c 370	18	2.5	8420	6	AAS46657	Aas46657 Tumour su
c 314	18	2.5	6195	6	ABL32591	c 371	18	2.5	8420	6	ABK31324	Abk31324 Signal tr
c 315	18	2.5	6239	6	ABL33776	c 372	18	2.5	8456	6	ABL33976	Ab133976 Human imm
c 316	18	2.5	6239	6	ABK28297	c 373	18	2.5	8646	3	AAL14873	Aal14873 Nucleotid
c 317	18	2.5	6274	4	AAS46321	c 374	18	2.5	8648	7	ABQ77909	Abq77909 Ac-ab1dops
c 318	18	2.5	6274	6	ABK31238	c 375	18	2.5	8666	6	AAS46305	Aas46305 Tumour su
c 319	18	2.5	6274	7	ADK20354	c 376	18	2.5	8666	6	ABL32396	Ab132396 Human imm
c 320	18	2.5	6274	7	ADK64161	c 377	18	2.5	8666	6	ABK34008	Abk34008 Human DNA
c 321	18	2.5	6274	9	ADB54121	c 378	18	2.5	8666	6	ABQ67177	Abq67177 Human ang
c 322	18	2.5	6274	9	ADB54249	c 379	18	2.5	8666	6	ABK31118	Abk31118 Human lym
c 323	18	2.5	6312	4	AAS28998	c 380	18	2.5	8666	9	ADB54111	Abd54111 Pretreate
c 324	18	2.5	6312	4	AAS30241	c 381	18	2.5	8666	9	ADB54239	Abd54239 Pretreate
c 325	18	2.5	6312	4	AAS35075	c 382	18	2.5	8666	9	ADB54177	Abd54177 Human lym
c 326	18	2.5	6312	4	ABK06808	c 383	18	2.5	8666	9	ADB84101	Ad84101 Human lym
c 327	18	2.5	6312	4	AA162822	c 384	18	2.5	8758	6	ABL33118	Ab133118 Human imm
c 328	18	2.5	6312	4	ABK44027	c 385	18	2.5	8867	9	ADK56784	Ad56784 Rat gene
c 329	18	2.5	6312	5	AAS29742	c 386	18	2.5	9007	4	AAS46616	Aas46616 Tumour su
c 330	18	2.5	6312	6	ABT07833	c 387	18	2.5	9095	6	ABQ67061	Abq67061 Human ang
c 331	18	2.5	6312	6	ABV84145	c 388	18	2.5	9577	9	ADC87604	Adc87604 Human GPC
c 332	18	2.5	6312	7	ACD01496	c 389	18	2.5	9646	6	ABL33688	Ab133688 Human imm
c 333	18	2.5	6312	9	ADC46517	c 390	18	2.5	9725	6	ABL33292	Ab133292 Human imm
c 334	18	2.5	6325	7	ABT10086	c 391	18	2.5	9725	6	ABN80180	Abn80180 Human che
c 335	18	2.5	6325	7	ABT10086	c 392	18	2.5	9830	4	AAK82378	Aak82378 Human imm
c 336	18	2.5	6326	6	ABL92286	c 393	18	2.5	9964	6	ABL32098	Ab132098 Human imm
c 337	18	2.5	6326	6	ABK49357	c 394	18	2.5	11029	4	AAS46414	Aas46414 DNA trans
c 338	18	2.5	6326	6	ADK22337	c 395	18	2.5	11555	6	ABL32616	Ab132616 Human imm
c 339	18	2.5	6397	6	ABL32819	c 396	18	2.5	11555	6	ADK28380	Adk28380 Human che
c 340	18	2.5	6419	6	ABL32267	c 397	18	2.5	11662	6	ABL33900	Ab133900 Human imm
c 341	18	2.5	6476	6	ABL32541	c 398	18	2.5	11812	4	AAS45501	Aas45501 Chemt cell
c 342	18	2.5	6531	6	ABL32640	c 399	18	2.5	11812	4	AAS46741	Aas46741 Tumour su
c 343	18	2.5	6577	6	ABL33357	c 400	18	2.5	11812	6	ABL34118	Ab134118 Human imm
c 344	18	2.5	6577	6	ABL70362	c 401	18	2.5	11812	6	ABK28431	Abk28431 DNA trans
c 345	18	2.5	6577	6	ABN61222	c 402	18	2.5	11976	6	ABL32594	Ab132594 Human imm
c 346	18	2.5	6641	6	ABN80002	c 403	18	2.5	12409	6	AAS63312	Aas63312 Chemt cell
c 347	18	2.5	6749	2	AAT47561	c 404	18	2.5	12465	6	AAS45327	Aas45327 Chemt cell
c 348	18	2.5	6749	2	AAT47564	c 405	18	2.5	12465	6	AAS45327	Ab132633 Human imm
c 349	18	2.5	6777	9	ADB47449	c 406	18	2.5	12574	4	AAL05318	Aal05318 Human rep

c 407	18	2.5	12574	4	AB198187	Human tes	c 464	18	2.5	56516	2	AAZ00870	Aaz00870 F01 genom
c 408	18	2.5	12501	6	AB134207	Human lmm	c 465	18	2.5	56520	2	AAZ01022	Aaz01022 Wild type
c 409	18	2.5	12733	6	AB132091	Human lmm	c 466	18	2.5	69327	6	AB555821	Ab555821 Human tra
c 410	18	2.5	12814	2	AAZ4730	Swedish-F	c 467	18	2.5	96389	8	ADK02675	Adk02675 Mouse Top
c 411	18	2.5	13069	4	AA536350	Human car	c 468	18	2.5	96389	9	ADB72413	Adb72413 Mouse Top
c 412	18	2.5	13069	4	AAK74980	Human lmm	c 469	18	2.5	96591	9	ADB72413	Adb72413 Mouse Top
c 413	18	2.5	13069	9	ADK47044	Human car	c 470	18	2.5	96592	8	ADK02822	Adk02822 Human SOS
c 414	18	2.5	13326	6	AB133712	Human lmm	c 471	18	2.5	96592	9	ADB72560	Adb72560 Human SOS
c 415	18	2.5	13584	6	AB132615	Human lmm	c 472	18	2.5	96594	8	ADB72560	Adb72560 Human SOS
c 416	18	2.5	14253	6	AB133494	Human lmm	c 473	18	2.5	96594	9	ADB72494	Adb72494 Human MOR
c 417	18	2.5	14919	4	AA163992	Human pol	c 474	18	2.5	96594	9	ADB72494	Adb72494 Human MOR
c 418	18	2.5	14919	4	AA531670	Human pol	c 475	18	2.5	110000	2	AAZ02063	Aaz02063 Human MOR
c 419	18	2.5	15121	6	ABN80238	Human che	c 476	18	2.5	110000	2	AAZ02063	Aaz02063 Human MOR
c 420	18	2.5	15587	6	ABK31343	Human che	c 477	18	2.5	110000	6	ABN90521	Abn90521 Human MOR
c 421	18	2.5	15587	6	ABK70304	Human che	c 478	18	2.5	110000	6	ABN90521	Abn90521 Human MOR
c 422	18	2.5	15587	6	ABK61238	Human gen	c 479	18	2.5	110000	6	ABN90521	Abn90521 Human MOR
c 423	18	2.5	15692	2	AAZ4731	London-FA	c 480	18	2.5	110000	6	ABN90521	Abn90521 Human MOR
c 424	18	2.5	15692	2	AAZ4732	London-FA	c 481	18	2.5	110000	6	ABN90521	Abn90521 Human MOR
c 425	18	2.5	15701	2	AAZ4733	Swedish-F	c 482	18	2.5	110000	7	ACF67367	Acf67367 Human MOR
c 426	18	2.5	15767	6	AB133206	Human lmm	c 483	18	2.5	110000	7	ACF67367	Acf67367 Human MOR
c 427	18	2.5	15767	6	AB134552	Human met	c 484	18	2.5	110000	7	ACF67367	Acf67367 Human MOR
c 428	18	2.5	16325	4	AAK73303	Human lmm	c 485	18	2.5	110000	7	ACF65387	Acf65387 Human MOR
c 429	18	2.5	16766	6	AB134156	Human lmm	c 486	18	2.5	113515	6	AB134174	Ab134174 Human MOR
c 430	18	2.5	16994	6	AB132989	Human lmm	c 487	18	2.5	12653	7	ABK77167	Abk77167 Human MOR
c 431	18	2.5	17131	6	AB133052	Human lmm	c 488	18	2.5	143899	6	AA138336	Aa138336 Human MOR
c 432	18	2.5	17294	6	AB132987	Human lmm	c 489	18	2.5	215980	6	AA138337	Aa138337 Human MOR
c 433	18	2.5	17341	6	AA114872	Human lmm	c 490	18	2.5	267156	6	AB168560	Ab168560 Human MOR
c 434	18	2.5	17341	6	AA143176	Human lmm	c 491	18	2.5	349999	7	AAZ01022	Aaz01022 Human MOR
c 435	18	2.5	17580	6	ABN54312	Human che	c 492	18	2.5	49	6	AAZ01022	Aaz01022 Human MOR
c 436	18	2.5	17580	6	ABN80013	Human che	c 493	18	2.5	180	6	ABQ95184	Abq95184 Human MOR
c 437	18	2.5	17595	6	AB132575	Human lmm	c 494	18	2.5	182	6	ABQ95189	Abq95189 Human MOR
c 438	18	2.5	17595	6	AB154342	Human lmm	c 495	18	2.5	186	6	ABQ95188	Abq95188 Human MOR
c 439	18	2.5	17995	4	AAK85152	Human lmm	c 496	18	2.5	199	6	ABQ95187	Abq95187 Human MOR
c 440	18	2.5	18636	5	AA512088	Human lmm	c 497	18	2.5	202	5	ABQ95187	Abq95187 Human MOR
c 441	18	2.5	18636	6	ABQ79004	Human lmm	c 498	18	2.5	227	6	ABQ95187	Abq95187 Human MOR
c 442	18	2.5	18636	6	ABQ79004	Human lmm	c 499	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 443	18	2.5	18875	7	ABK7168	Human lmm	c 500	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 444	18	2.5	19787	6	AB133450	Human lmm	c 501	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 445	18	2.5	20190	9	ADK71539	Human lmm	c 502	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 446	18	2.5	20510	4	AB119710	Human lmm	c 503	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 447	18	2.5	21000	6	ABK12423	Human lmm	c 504	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 448	18	2.5	23683	6	AB134622	Human met	c 505	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 449	18	2.5	23683	6	AB170481	Human met	c 506	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 450	18	2.5	24387	5	AB119048	Human met	c 507	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 451	18	2.5	27184	7	ADK56087	Human FOS	c 508	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 452	18	2.5	27184	8	ADK02449	Human FOS	c 509	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 453	18	2.5	27184	9	ADK02449	Human FOS	c 510	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 454	18	2.5	27184	9	ADK02449	Human FOS	c 511	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 455	18	2.5	32203	4	AA536349	Human FOS	c 512	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 456	18	2.5	32203	4	AA536349	Human FOS	c 513	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 457	18	2.5	34548	6	AB170603	Human car	c 514	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 458	18	2.5	34769	4	AA546775	Human car	c 515	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 459	18	2.5	37515	6	ABQ66998	Human ang	c 516	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 460	18	2.5	42863	9	ADK68612	Human GPC	c 517	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 461	18	2.5	46050	7	ABK13974	Human Ras	c 518	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 462	18	2.5	47513	4	AAK74979	Human Ras	c 519	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR
c 463	18	2.5	51959	6	ABQ99650	Human mem	c 520	18	2.5	233	2	AAZ01022	Aaz01022 Human MOR

c 521	17	2.4	366	4	AA114547	AA114547 Human bre	c 578	17	2.4	540	4	AB196471	AB196471 Human tes
522	17	2.4	379	2	AA103501	AA103501 Neisseria	579	17	2.4	543	4	AAK53569	AAK53569 Human tes
523	17	2.4	382	2	AA193549	AA193549 Human pol	c 580	17	2.4	550	6	ABQ40570	ABQ40570 Oligonuc
524	17	2.4	382	8	ACH49811	ACH49811 Human 1eu	581	17	2.4	550	6	ABQ40571	ABQ40571 Oligonuc
525	17	2.4	386	9	ADD71843	ADD71843 Human uri	582	17	2.4	551	6	ABQ45968	ABQ45968 Oligonuc
c 526	17	2.4	391	8	ACH47886	ACH47886 Human 1un	c 583	17	2.4	551	6	ABQ45969	ABQ45969 Oligonuc
527	17	2.4	396	6	AB232150	AB232150 Candida a	584	17	2.4	553	7	AA521852	AA521852 Human tes
c 528	17	2.4	397	7	ABK49507	ABK49507 Bovine ES	585	17	2.4	555	7	ACF72636	ACF72636 Human tes
529	17	2.4	401	4	AAK96626	AAK96626 Human neu	586	17	2.4	558	5	ABV47989	ABV47989 Human pro
530	17	2.4	401	4	AAK98119	AAK98119 Human neu	c 587	17	2.4	572	4	AAH01663	AAH01663 Human pro
531	17	2.4	401	6	ABT01396	ABT01396 Human neu	c 588	17	2.4	572	4	AAH01663	AAH01663 Human pro
532	17	2.4	401	6	ABT02889	ABT02889 Human neu	c 589	17	2.4	578	6	ABN63027	ABN63027 Human pro
533	17	2.4	402	4	AA539276	AA539276 Novel hum	c 590	17	2.4	582	5	ABV49010	ABV49010 Human can
534	17	2.4	414	4	AA117337	AA117337 Human bre	591	17	2.4	584	5	ABV53869	ABV53869 Human pro
535	17	2.4	418	4	AA182992	AA182992 Human pol	c 592	17	2.4	588	3	AAK98031	AAK98031 Human col
536	17	2.4	418	4	AA185620	AA185620 Human pol	c 593	17	2.4	588	4	AAH34440	AAH34440 Human col
c 537	17	2.4	423	3	AAA90522	AAA90522 Murine am	594	17	2.4	597	2	AAK88556	AAK88556 Human chr
538	17	2.4	428	4	AA109448	AA109448 Human bre	595	17	2.4	604	5	ABV53636	ABV53636 Human chr
c 539	17	2.4	433	2	AAQ59567	AAQ59567 Human bra	c 596	17	2.4	606	6	ABN65916	ABN65916 Human can
c 540	17	2.4	434	2	AAQ64812	AAQ64812 Murine FD	c 597	17	2.4	609	6	ABQ34666	ABQ34666 Oligonuc
541	17	2.4	436	4	AA122201	AA122201 Human bre	598	17	2.4	609	6	ABQ34667	ABQ34667 Oligonuc
c 542	17	2.4	436	5	ABV34139	ABV34139 Human pro	c 599	17	2.4	616	5	ABV55896	ABV55896 Human pro
543	17	2.4	456	4	AAK88148	AAK88148 Human dig	c 600	17	2.4	618	7	ACK28514	ACK28514 Prokaryot
544	17	2.4	458	5	ABAI3178	ABAI3178 Human ner	601	17	2.4	628	6	ABK92464	ABK92464 Human pro
545	17	2.4	462	8	ACH22226	ACH22226 Human adu	602	17	2.4	639	4	AB120893	AB120893 Drosophila
546	17	2.4	464	4	AA110630	AA110630 Probe #56	c 603	17	2.4	651	6	ABK35979	ABK35979 CDNA sequ
547	17	2.4	464	4	ABAS2277	ABAS2277 Human foe	c 604	17	2.4	654	7	AB252811	AB252811 Aspergilli
548	17	2.4	464	4	AA131884	AA131884 Probe #57	c 605	17	2.4	660	4	AA104633	AA104633 Human rep
549	17	2.4	464	4	AB222078	AB222078 Probe #54	c 606	17	2.4	660	4	AB197546	AB197546 Human tes
550	17	2.4	464	4	AAK26001	AAK26001 Human bon	607	17	2.4	675	2	AAV11700	AAV11700 Bacteriocin
551	17	2.4	464	4	AAK00552	AAK00552 Human bra	608	17	2.4	675	2	AAK117724	AAK117724 Bacteriocin
552	17	2.4	464	4	AB255888	AB255888 Human 1lv	c 609	17	2.4	682	6	ABQ44992	ABQ44992 Oligonuc
553	17	2.4	464	5	AA100561	AA100561 Probe #55	c 610	17	2.4	682	6	ABQ44993	ABQ44993 Oligonuc
554	17	2.4	464	6	AB250582	AB250582 Human gen	611	17	2.4	689	5	AA500844	AA500844 Human cDN
c 555	17	2.4	471	5	ABV13018	ABV13018 Human pro	612	17	2.4	701	3	AAK99940	AAK99940 Human sec
556	17	2.4	486	8	ACH23790	ACH23790 Human adu	c 613	17	2.4	712	4	AA123409	AA123409 Human bre
c 557	17	2.4	488	4	AA186910	AA186910 Human pol	c 614	17	2.4	721	6	ABQ79714	ABQ79714 MMV full
c 558	17	2.4	488	8	ACH27078	ACH27078 Human adu	615	17	2.4	727	9	ABD17703	ABD17703 DNA (Seq)
c 559	17	2.4	501	5	ABV60774	ABV60774 Human pro	c 616	17	2.4	728	4	AA162736	AA162736 Human bre
c 560	17	2.4	505	7	ACC60331	ACC60331 R1ce endo	c 617	17	2.4	728	4	AA107440	AA107440 Human rep
561	17	2.4	505	8	ACH22493	ACH22493 Human adu	c 618	17	2.4	732	4	AAK88021	AAK88021 Cucumbe
562	17	2.4	507	5	ABV18201	ABV18201 Human pro	c 619	17	2.4	732	4	AA115527	AA115527 Human bre
c 563	17	2.4	509	4	AA118218	AA118218 Human bre	c 620	17	2.4	743	6	ABQ51475	ABQ51475 Oligonuc
564	17	2.4	522	4	ABA60974	ABA60974 Human foe	c 621	17	2.4	743	6	ABQ51474	ABQ51474 Oligonuc
565	17	2.4	522	4	AA140871	AA140871 Probe #95	622	17	2.4	753	3	AAA70190	AAA70190 Plasmodiu
566	17	2.4	522	4	AAK35155	AAK35155 Human bon	623	17	2.4	760	7	ACF65583	ACF65583 Photorhab
567	17	2.4	522	4	AAK09266	AAK09266 Human bra	624	17	2.4	763	4	AAK22943	AAK22943 Human pro
568	17	2.4	522	6	AB234905	AB234905 Human 1lv	c 625	17	2.4	775	8	ACC59728	ACC59728 Nucleotid
569	17	2.4	522	6	AB209597	AB209597 Human gen	626	17	2.4	781	4	AA124400	AA124400 Human bre
c 570	17	2.4	524	6	ABQ44323	ABQ44323 Oligonuc	627	17	2.4	790	6	ABQ23800	ABQ23800 Oligonuc
c 571	17	2.4	524	6	ABQ44322	ABQ44322 Oligonuc	c 628	17	2.4	790	6	ABQ23801	ABQ23801 Oligonuc
572	17	2.4	531	9	ABD71850	ABD71850 Human ur1	c 629	17	2.4	796	6	ABQ41954	ABQ41954 Oligonuc
573	17	2.4	533	7	ACD92635	ACD92635 Human col	630	17	2.4	796	6	ABQ41955	ABQ41955 Oligonuc
574	17	2.4	537	4	AAK63362	AAK63362 Human 1mm	631	17	2.4	799	3	AAK07810	AAK07810 Fusarium
c 575	17	2.4	537	6	ABQ21278	ABQ21278 Oligonuc	632	17	2.4	813	4	AA195914	AA195914 Human neu
c 576	17	2.4	537	6	ABQ21279	ABQ21279 Oligonuc	c 633	17	2.4	819	6	ABQ98941	ABQ98941 Human ORF
c 577	17	2.4	540	4	AA101003	AA101003 Human rep	c 634	17	2.4	821	6	ABK66716	ABK66716 Helicobac

c 635	17	2.4	823	5	ABV19757	Abv19757 Human pro	692	17	2.4	1513	2	AA16103	AA16103 Xylanase
c 636	17	2.4	830	2	AA162455	AA162455 Lambda Sh	693	17	2.4	1542	2	AA142305	AA142305 Male-spec
c 637	17	2.4	838	4	AA115741	AA115741 Human bre	694	17	2.4	1566	2	AAQ05140	AAQ05140 Sequence
c 638	17	2.4	865	4	AAH03440	AAH03440 Human cDN	695	17	2.4	1628	4	AA533067	AA533067 DNA encod
c 639	17	2.4	877	4	AA194066	AA194066 Human neu	696	17	2.4	1632	6	AAH70417	AAH70417 Streptococ
c 640	17	2.4	882	6	ABK66545	ABK66545 Helicobac	697	17	2.4	1662	3	AAAC47419	AAAC47419 Streptococ
c 641	17	2.4	889	2	AA114390	AA114390 H. pylori	698	17	2.4	1662	3	AAAC36330	AAAC36330 Streptococ
c 642	17	2.4	909	8	ACCS9705	ACCS9705 Acetificia	699	17	2.4	1662	3	AAAC36330	AAAC36330 Streptococ
c 643	17	2.4	956	7	AB218441	AB218441 Group III	700	17	2.4	1680	5	AAH67883	AAH67883 Streptococ
c 644	17	2.4	956	7	AB218441	AB218441 Group III	701	17	2.4	1725	2	AAV52582	AAV52582 Human pro
c 645	17	2.4	960	7	ACF69120	ACF69120 Photobact	702	17	2.4	1752	7	AAH58270	AAH58270 Zea mays
c 646	17	2.4	988	2	AAQ28117	AAQ28117 P. faecipa	703	17	2.4	1757	7	AAH12157	AAH12157 Streptococ
c 647	17	2.4	1000	8	ADH23168	ADH23168 Envitcome	704	17	2.4	1771	3	AAH14075	AAH14075 Human SFR
c 648	17	2.4	1001	3	AAH51776	AAH51776 Human UGT	705	17	2.4	1798	3	AAZ49566	AAZ49566 Maize MLO
c 649	17	2.4	1001	3	AAH51473	AAH51473 Human UGT	706	17	2.4	1820	7	AAH33990	AAH33990 Human pig
c 650	17	2.4	1001	3	AAH51475	AAH51475 Human UGT	707	17	2.4	1826	7	AAH21547	AAH21547 Streptococ
c 651	17	2.4	1001	3	AAH51474	AAH51474 Human UGT	708	17	2.4	2000	6	ABE16755	ABE16755 Streptococ
c 652	17	2.4	1015	6	ABQ53075	ABQ53075 Oligonucel	709	17	2.4	2000	6	ABE15957	ABE15957 Streptococ
c 653	17	2.4	1015	6	ABQ53074	ABQ53074 Oligonucel	710	17	2.4	2000	6	ABE17392	ABE17392 Streptococ
c 654	17	2.4	1043	3	AAH02498	AAH02498 Human col	711	17	2.4	2000	7	AAH68975	AAH68975 Human SFR
c 655	17	2.4	1080	3	AAH59285	AAH59285 Human sec	712	17	2.4	2030	3	AAH14074	AAH14074 Human SFR
c 656	17	2.4	1095	2	AAH59258	AAH59258 Human sec	713	17	2.4	2048	6	ABH50243	ABH50243 Streptococ
c 657	17	2.4	1095	4	AAH59239	AAH59239 Human cDN	714	17	2.4	2048	6	ABH50244	ABH50244 Streptococ
c 658	17	2.4	1095	6	AAH59239	AAH59239 Human cDN	715	17	2.4	2130	7	ABH22523	ABH22523 Streptococ
c 659	17	2.4	1103	2	AAH61382	AAH61382 Human pol	716	17	2.4	2182	5	AAH23831	AAH23831 Streptococ
c 660	17	2.4	1103	7	AAH39831	AAH39831 Human sec	717	17	2.4	2188	9	ABH62780	ABH62780 Human tra
c 661	17	2.4	1103	7	AAH39831	AAH39831 Human sec	718	17	2.4	2194	4	AAH59630	AAH59630 Human cDN
c 662	17	2.4	1103	7	AAH39831	AAH39831 Human sec	719	17	2.4	2214	7	AAH28435	AAH28435 Streptococ
c 663	17	2.4	1103	8	AAH39831	AAH39831 Human sec	720	17	2.4	2226	2	AAH11704	AAH11704 Streptococ
c 664	17	2.4	1103	8	AAH39831	AAH39831 Human sec	721	17	2.4	2226	2	AAH11704	AAH11704 Streptococ
c 665	17	2.4	1106	4	AAH03338	AAH03338 Human rep	722	17	2.4	2227	6	ABH14977	ABH14977 Streptococ
c 666	17	2.4	1113	7	AAH34776	AAH34776 Streptococ	723	17	2.4	2227	6	ABH14977	ABH14977 Streptococ
c 667	17	2.4	1124	6	ABH58163	ABH58163 Human ABC	724	17	2.4	2235	6	ABH69263	ABH69263 Streptococ
c 668	17	2.4	1145	2	AAH34089	AAH34089 Streptococ	725	17	2.4	2262	6	ABH69263	ABH69263 Streptococ
c 669	17	2.4	1145	2	AAH34089	AAH34089 Streptococ	726	17	2.4	2262	6	ABH69263	ABH69263 Streptococ
c 670	17	2.4	1155	4	AAH81186	AAH81186 Human imm	727	17	2.4	2282	2	AAH54015	AAH54015 Streptococ
c 671	17	2.4	1155	4	AAH81186	AAH81186 Human imm	728	17	2.4	2282	2	AAH54015	AAH54015 Streptococ
c 672	17	2.4	1158	2	AAH24720	AAH24720 H. pylori	729	17	2.4	2325	2	AAH31376	AAH31376 Streptococ
c 673	17	2.4	1170	7	AAH20688	AAH20688 Streptococ	730	17	2.4	2330	4	AAH32646	AAH32646 Streptococ
c 674	17	2.4	1173	8	AAH32467	AAH32467 DNA encod	731	17	2.4	2349	4	AAH43198	AAH43198 Streptococ
c 675	17	2.4	1176	4	AAH53791	AAH53791 Helicobac	732	17	2.4	2390	6	AAH76001	AAH76001 Streptococ
c 676	17	2.4	1188	5	AAH41136	AAH41136 Streptococ	733	17	2.4	2393	4	AAH157844	AAH157844 Streptococ
c 677	17	2.4	1201	3	AAH62524	AAH62524 Human sec	734	17	2.4	2396	4	ABH04156	ABH04156 Streptococ
c 678	17	2.4	1201	3	AAH62524	AAH62524 Human sec	735	17	2.4	2466	9	AAH43917	AAH43917 Streptococ
c 679	17	2.4	1254	7	AAH23020	AAH23020 Human sec	736	17	2.4	2474	2	AAH90771	AAH90771 Streptococ
c 680	17	2.4	1259	3	AAH66428	AAH66428 Human sec	737	17	2.4	2542	6	AAH90868	AAH90868 Streptococ
c 681	17	2.4	1282	7	AAH21616	AAH21616 Streptococ	738	17	2.4	2545	2	AAH99634	AAH99634 Streptococ
c 682	17	2.4	1320	2	AAH29958	AAH29958 5-Substid.	739	17	2.4	2545	2	AAH04645	AAH04645 Streptococ
c 683	17	2.4	1320	2	AAH29958	AAH29958 5-Substid.	740	17	2.4	2545	2	AAH04645	AAH04645 Streptococ
c 684	17	2.4	1320	2	AAH29958	AAH29958 5-Substid.	741	17	2.4	2545	2	AAH04645	AAH04645 Streptococ
c 685	17	2.4	1320	2	AAH29958	AAH29958 5-Substid.	742	17	2.4	2545	2	AAH04645	AAH04645 Streptococ
c 686	17	2.4	1323	2	AAH72050	AAH72050 Sequence	743	17	2.4	2545	2	AAH04645	AAH04645 Streptococ
c 687	17	2.4	1350	2	AAH90860	AAH90860 Nucleotid	744	17	2.4	2545	2	AAH04645	AAH04645 Streptococ
c 688	17	2.4	1364	5	AAH64383	AAH64383 H. pylori	745	17	2.4	2723	9	AAH33101	AAH33101 Streptococ
c 689	17	2.4	1407	6	AAH56226	AAH56226 Streptococ	746	17	2.4	2743	4	AAH20310	AAH20310 Streptococ
c 690	17	2.4	1427	6	AAH73067	AAH73067 Human imm	747	17	2.4	2781	4	AAH73960	AAH73960 Streptococ
c 691	17	2.4	1493	9	AAH50713	AAH50713 Primary r	748	17	2.4	2814	6	AAH34126	AAH34126 Streptococ

c 749	17	2.4	2829	3	AAc90465	AAc90465 Human unc	806	17	2.4	4574	4	ABL16449	AB114449 Drosophill
c 750	17	2.4	2835	2	AAx91639	AAx91639 Porphyrom	c 807	17	2.4	4619	4	ABL01968	AB101968 Drosophill
751	17	2.4	2912	7	ACC48536	ACC48536 Stephyloc	c 808	17	2.4	4623	4	ABL12280	AB112280 Drosophill
c 752	17	2.4	2937	7	ACa30450	ACa30450 Prokaryot	c 809	17	2.4	4623	4	ABL20892	AB120892 Drosophill
c 753	17	2.4	2964	4	AAFB8022	AAFB8022 Cucumbe	c 810	17	2.4	4762	3	AAx99146	ABV99146 Human
c 754	17	2.4	2964	7	ABX13453	ABX13453 C. sativu	811	17	2.4	4772	7	ACC50330	ACc50330 Nucleotid
755	17	2.4	2984	4	ABL30152	ABL30152 Drosophill	c 812	17	2.4	4826	4	ABL18252	AB118252 Breast ca
756	17	2.4	2990	2	AAQ04123	AAQ04123 Adenyl cy	c 813	17	2.4	4826	4	ABL12278	AB112278 Drosophill
c 757	17	2.4	3001	3	AAH51771	AAH51771 Chromosom	c 814	17	2.4	4954	4	AAK74818	AAK74818 Human
c 758	17	2.4	3001	6	ABN84406	ABn84406 Human sup	c 815	17	2.4	4959	6	ABV99146	ABV99146 Human
c 759	17	2.4	3030	7	ABE210166	ABe210166 Hematopo	c 816	17	2.4	4980	4	ABL02516	AB102516 Drosophill
c 760	17	2.4	3030	7	ABE210020	ABe210020 Hematopo	c 817	17	2.4	5032	6	AAx61083	AAx61083 Human
761	17	2.4	3037	6	ABK33994	ABk33994 Human DNA	c 818	17	2.4	5033	4	AAx46373	AAx46373 Human
762	17	2.4	3037	7	AD20424	AD20424 Prostata	819	17	2.4	5072	2	AAx34633	AAx34633 wheast sta
763	17	2.4	3037	7	ADa84231	ADa84231 Human ren	c 820	17	2.4	5102	6	ABL92274	AB192274 Chemi call
764	17	2.4	3041	4	ABL11656	ABl11656 Drosophill	c 821	17	2.4	5126	6	ABL70493	AB170493 Chemi call
765	17	2.4	3063	6	ABK84249	ABk84249 Human cDN	c 822	17	2.4	5133	6	ABL33913	AB133913 Human
c 766	17	2.4	3077	7	ABE210216	ABe210216 Hematopo	c 823	17	2.4	5164	6	ABO67122	ABO67122 Human
c 767	17	2.4	3105	4	ABL15038	ABl15038 Drosophill	c 824	17	2.4	5179	6	ABL33996	AB133996 Human
c 768	17	2.4	3148	4	ABL11120	ABl11120 Drosophill	c 825	17	2.4	5179	6	ABE28403	ABE28403 Human
c 769	17	2.4	3203	4	ABL11156	ABl11156 Drosophill	c 826	17	2.4	5187	9	ADB67038	ADB67038 Mouse Gal
c 770	17	2.4	3298	6	ABK93938	ABk93938 DNA encod	c 827	17	2.4	5219	6	ABL32768	AB132768 Human
c 771	17	2.4	3304	4	ABL16584	ABl16584 Drosophill	c 828	17	2.4	5261	6	ABL70577	AB170577 Chemi call
c 772	17	2.4	3416	4	ABL16580	ABl16580 Drosophill	c 829	17	2.4	5261	6	AAx61392	AAx61392 Human
773	17	2.4	3505	2	AAx84667	AAx84667 Human KDR	c 830	17	2.4	5276	6	AAx46379	AAx46379 Tumour su
774	17	2.4	3520	4	AAH54185	AAH54185 S. epider	c 831	17	2.4	5276	6	ABL32826	AB132826 Human
775	17	2.4	3674	4	ABL29636	ABl29636 Drosophill	c 832	17	2.4	5283	6	ABL33893	AB133893 Human
776	17	2.4	3689	4	AAH29914	AAH29914 C albican	c 833	17	2.4	5312	6	ABK33960	ABK33960 Human
c 777	17	2.4	3714	7	ACA28933	ACA28933 Prokaryot	c 834	17	2.4	5312	7	ADA20357	ADA20357 Prostata
778	17	2.4	3750	4	ABL02680	ABl02680 Drosophill	c 835	17	2.4	5312	9	ADN84164	ADN84164 Human ren
c 779	17	2.4	3775	6	ABQ70853	ABq70853 llisteria	c 836	17	2.4	5312	9	ADB54090	ADB54090 Pretreaste
780	17	2.4	3830	7	ABK69844	ABk69844 Human sec	c 837	17	2.4	5312	9	ADB54218	ADB54218 Pretreaste
781	17	2.4	3830	7	ADAs7726	ADAs7726 BAC fragm	c 838	17	2.4	5312	9	ADE84080	ADE84080 Human 1ym
782	17	2.4	3830	7	ACC50859	ACC50859 Human sec	c 839	17	2.4	5312	9	ADE84156	ADE84156 Human 1ym
783	17	2.4	3830	7	ABE71481	ABe71481 Secreted	840	17	2.4	5325	3	AAx58001	AAx58001 5325 bp C
784	17	2.4	3830	8	ADB91837	ADB91837 Human sec	841	17	2.4	5397	6	ABL33044	AB133044 Human
785	17	2.4	3830	9	ADC74612	ADc74612 Human sec	c 842	17	2.4	5399	6	ABL32142	AB132142 Human
786	17	2.4	3830	9	ADD38132	ADd38132 cDNA clon	843	17	2.4	5407	6	ABK31463	ABK31463 Signal tr
787	17	2.4	3844	6	ABK69847	ABk69847 Human sec	844	17	2.4	5407	6	ABL70438	AB170438 Chemi call
788	17	2.4	3844	7	ADAs7729	ADAs7729 BAC fragm	845	17	2.4	5432	6	AAx61379	AAx61379 Human gen
789	17	2.4	3844	7	ACC50862	ACC50862 Human sec	846	17	2.4	5432	6	AAH80001	AAH80001 Human che
790	17	2.4	3844	7	ABE71484	ABe71484 Secreted	847	17	2.4	5452	6	ABL33149	AB133149 Human
791	17	2.4	3844	8	ADB91840	ADB91840 Human sec	848	17	2.4	5460	6	ABL33905	AB133905 Human
792	17	2.4	3844	9	ADC74615	ADc74615 Human sec	c 849	17	2.4	5508	6	ABL33398	AB133398 Human
793	17	2.4	3844	9	ADD38135	ADd38135 cDNA clon	c 850	17	2.4	5514	6	ABL32130	AB132130 Human
794	17	2.4	3878	4	ABE20538	ABe20538 Drosophill	c 851	17	2.4	5537	2	AAQ89554	AAQ89554 Human
795	17	2.4	3956	2	AAV31377	AAv31377 Kojibiose	c 852	17	2.4	5537	2	AAQ90330	AAQ90330 Exons 1,
796	17	2.4	4043	6	ABK91986	ABk91986 lung spec	c 853	17	2.4	5537	2	AAH79736	AAH79736 Human cho
797	17	2.4	4063	4	ABE28494	ABe28494 Drosophill	c 854	17	2.4	5546	6	ABL32390	AB132390 Human
c 798	17	2.4	4244	3	AAc69145	AAc69145 Human ABC	c 855	17	2.4	5546	6	ABK34004	ABK34004 Human DNA
c 799	17	2.4	4253	3	ABL18524	ABl18524 Drosophill	c 856	17	2.4	5557	6	ABL33546	AB133546 Human
800	17	2.4	4286	3	AAO9207	AAo9207 Human gal	c 857	17	2.4	5565	6	ABL32262	AB132262 Human
801	17	2.4	4445	4	ABL16443	ABl16443 Drosophill	c 858	17	2.4	5649	4	AAx46384	AAx46384 Tumour au
802	17	2.4	4446	4	ABK42730	ABk42730 Genomic s	c 859	17	2.4	5649	6	ABK40008	ABK40008 Human che
803	17	2.4	4446	8	ADB60886	ADB60886 Connectiv	c 860	17	2.4	5649	6	ABL32849	AB132849 Human
804	17	2.4	4501	4	ABL10480	ABl10480 Drosophill	c 861	17	2.4	5649	9	ADB54126	ADB54126 Pretreaste
c 805	17	2.4	4537	4	AB112154	AB112154 Drosophill	c 862	17	2.4	5649	9	ADB54254	ADB54254 Pretreaste



c 863	17	2.4	5649	9	AD884108	Ad684108 Human lym	c 920	17	2.4	6102	6	AB133498	Ab133498 Human lym
c 864	17	2.4	5649	9	AD884184	Ad684184 Human lym	c 921	17	2.4	6103	6	AB133691	Ab133691 Human lym
c 865	17	2.4	5690	6	ABK40027	AbK40027 Human che	c 922	17	2.4	6107	6	ABN80104	AbN80104 Human lym
c 866	17	2.4	5690	6	AB133324	Ab133324 Human lym	c 923	17	2.4	6121	6	AB133975	Ab133975 Human lym
c 867	17	2.4	5690	6	AA563330	AA563330 Chemocal1	c 924	17	2.4	6132	6	AB133990	Ab133990 Human lym
c 868	17	2.4	5695	4	AA546537	AA546537 Tumour su	c 925	17	2.4	6184	6	AB133253	Ab133253 Human lym
c 869	17	2.4	5702	9	AD831422	Ad831422 Human dia	c 926	17	2.4	6184	6	AB134561	Ab134561 Human lym
c 870	17	2.4	5736	4	AL05108	Al05108 Human rep	c 927	17	2.4	6215	6	AB133190	Ab133190 Human lym
c 871	17	2.4	5736	4	AL04572	Al04572 Human rep	c 928	17	2.4	6216	6	ABK39932	AbK39932 Human che
c 872	17	2.4	5736	4	AB197495	Ab197495 Human tes	c 929	17	2.4	6233	4	AA546497	AA546497 Chemocal1
c 873	17	2.4	5763	6	AB198000	Ab198000 Human tes	c 930	17	2.4	6233	4	AA546497	AA546497 Tumour su
c 874	17	2.4	5763	6	AB133289	Ab133289 Human lym	c 931	17	2.4	6239	6	ABK93553	AbK93553 Human bre
c 875	17	2.4	5763	6	AB132182	Ab132182 Human lym	c 932	17	2.4	6247	6	AB132275	Ab132275 Human lym
c 876	17	2.4	5776	6	AB192224	Ab192224 Chemocal1	c 933	17	2.4	6255	6	AB134028	Ab134028 Human lym
c 877	17	2.4	5786	6	AA529976	AA529976 Human lym	c 934	17	2.4	6271	4	AA546455	AA546455 Tumour su
c 878	17	2.4	5786	6	AB192976	Ab192976 Human lym	c 935	17	2.4	6271	6	AB133336	Ab133336 Human lym
c 879	17	2.4	5814	6	AB133560	Ab133560 Human nov	c 936	17	2.4	6271	6	ABK39977	AbK39977 Human DNA
c 880	17	2.4	5829	6	AB133727	Ab133727 Human lym	c 937	17	2.4	6271	7	ADK20370	ADK20370 Prostate
c 881	17	2.4	5829	6	AB133253	Ab133253 Human lym	c 938	17	2.4	6271	7	ADK84177	ADK84177 Human ren
c 882	17	2.4	5883	6	AB134473	Ab134473 Human met	c 939	17	2.4	6299	6	AB115032	Ab115032 Drosophill
c 883	17	2.4	5891	6	ABK34339	AbK34339 Human lym	c 940	17	2.4	6309	6	AB132304	Ab132304 Human lym
c 884	17	2.4	5917	6	ABK31469	AbK31469 Signal tr	c 941	17	2.4	6348	7	ACF65364	ACF65364 Phototrab
c 885	17	2.4	5921	6	AA546656	AA546656 Tumour su	c 942	17	2.4	6350	6	AB134628	Ab134628 Human met
c 886	17	2.4	5921	6	AB133361	Ab133361 Human lym	c 943	17	2.4	6350	6	AB170499	Ab170499 Chemocal1
c 887	17	2.4	5938	6	ABN80219	AbN80219 Human che	c 944	17	2.4	6352	6	AB132905	Ab132905 Human lym
c 888	17	2.4	5952	9	AD854319	Ad854319 Pretreaste	c 945	17	2.4	6352	7	ADK20359	ADK20359 Prostate
c 889	17	2.4	5952	9	AD854319	Ad854319 Pretreaste	c 946	17	2.4	6352	7	ADK84166	ADK84166 Human ren
c 890	17	2.4	5952	9	AA561212	AA561212 Human gen	c 947	17	2.4	6365	6	AB132124	Ab132124 Human lym
c 891	17	2.4	5989	6	AA561212	AA561212 Human gen	c 948	17	2.4	6397	6	AB132819	Ab132819 Human lym
c 892	17	2.4	5989	6	AA561212	AA561212 Human gen	c 949	17	2.4	6459	7	AB279546	AB279546 Redfish RF
c 893	17	2.4	5992	6	AA561208	AA561208 Human gen	c 950	17	2.4	6461	4	AA531467	AA531467 Human DNA
c 894	17	2.4	5992	6	AA561208	AA561208 Human gen	c 951	17	2.4	6461	4	AA531467	AA531467 Human DNA
c 895	17	2.4	5999	6	ABK39961	AbK39961 Human che	c 952	17	2.4	6461	9	ADK66791	ADK66791 Human DNA
c 896	17	2.4	5999	6	ABK39961	AbK39961 Human che	c 953	17	2.4	6461	9	ADK11078	ADK11078 Human arg
c 897	17	2.4	6012	4	AA546724	AA546724 Tumour su	c 954	17	2.4	6470	6	ABQ67091	ABQ67091 Human arg
c 898	17	2.4	6012	4	AA546724	AA546724 Tumour su	c 955	17	2.4	6500	6	AB133200	Ab133200 Human lym
c 899	17	2.4	6013	4	AA563314	AA563314 Chemocal1	c 956	17	2.4	6503	6	AB132721	Ab132721 Human lym
c 900	17	2.4	6031	4	AA546621	AA546621 Tumour su	c 957	17	2.4	6509	6	ABK31189	AbK31189 Signal tr
c 901	17	2.4	6035	4	AB133525	Ab133525 Human lym	c 958	17	2.4	6509	6	AA561086	AA561086 Human gen
c 902	17	2.4	6041	4	AB127104	Ab127104 Drosophill	c 959	17	2.4	6521	9	ADB54141	ADB54141 Pretreaste
c 903	17	2.4	6042	6	AB133592	Ab133592 Human lym	c 960	17	2.4	6535	4	AA546470	AA546470 Tumour su
c 904	17	2.4	6047	6	AB133459	Ab133459 Human lym	c 961	17	2.4	6552	6	ABN80141	AbN80141 Human che
c 905	17	2.4	6048	4	AA546614	AA546614 Tumour su	c 962	17	2.4	6577	6	AB133357	Ab133357 Human lym
c 906	17	2.4	6059	6	AB133481	Ab133481 Human lym	c 963	17	2.4	6577	6	AB170562	Ab170562 Chemocal1
c 907	17	2.4	6059	6	AB133480	Ab133480 Human lym	c 964	17	2.4	6577	6	AA561222	AA561222 Human gen
c 908	17	2.4	6059	6	AB154343	Ab154343 Chemocal1	c 965	17	2.4	6608	6	AB134035	Ab134035 Human lym
c 909	17	2.4	6070	6	AB154343	Ab154343 Chemocal1	c 966	17	2.4	6624	6	AB132043	Ab132043 Human lym
c 910	17	2.4	6070	6	AB192199	Ab192199 Chemocal1	c 967	17	2.4	6641	6	AB132315	Ab132315 Human lym
c 911	17	2.4	6070	6	AB149310	Ab149310 Human pol	c 968	17	2.4	6712	6	AB133691	Ab133691 Human lym
c 912	17	2.4	6073	6	AB133543	Ab133543 Human lym	c 969	17	2.4	6731	6	AB133061	Ab133061 Human lym
c 913	17	2.4	6074	6	AB133065	Ab133065 Human lym	c 970	17	2.4	6782	6	AB132776	Ab132776 Human lym
c 914	17	2.4	6074	6	ABN95880	AbN95880 Gene #237	c 971	17	2.4	6800	4	AA546640	AA546640 Tumour su
c 915	17	2.4	6077	9	AD854296	Ad854296 Pretreaste	c 972	17	2.4	6800	6	ABN80253	AbN80253 Human met
c 916	17	2.4	6077	9	AD854296	Ad854296 Pretreaste	c 973	17	2.4	6811	6	AB134540	Ab134540 Human che
c 917	17	2.4	6081	6	AB133429	Ab133429 Human lym	c 974	17	2.4	6811	6	AB170263	Ab170263 Chemocal1
c 918	17	2.4	6081	6	ABN80193	AbN80193 Human che	c 975	17	2.4	6831	6	AB133487	Ab133487 Human lym
c 919	17	2.4	6096	4	AB109666	Ab109666 Drosophill	c 976	17	2.4	6842	4	AB112114	Ab112114 Drosophill

## ALIGNMENTS

ID	AAA68248 standard; DNA; 714 BP.
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AC	AAA68248;	
XX		
DT	15-SEP-2003	(revised)
DT	06-AUG-2003	(revised)
DT	27-OCT-2000	(first entry)
XX		
DE	Bacteriophage 77 T7ORF017 nucleotide sequence.	
XX		
KW	Bacteriophage; antimicrobial; genome; identification; antibacterial.	
KW	bacterial growth inhibition; bacterial infection; ds.	
XX		
OS	Staphylococcus aureus; bacteriophage 77.	
PN	W0200032825-A2.	
XX		
PD	08-JUN-2000.	
XX		
PF	03-DEC-1999;	99WO-1B002040.
XX		
PR	03-DEC-1998;	98US-0110992P.
PR	03-JUN-1999;	99US-00326144.
PR	28-SEP-1999;	98US-00407804.
PR	30-SEP-1999;	99US-0157218P.
PR	01-DEC-1999;	99US-0168777P.

PR	02-DEC-1999;	99US-00454252.
XX		
PA	(PHAG-) PHAGETECH INC.	
PI	Pelletier J, Gros P, Dubow M;	
XX		
XX	WPI; 2000-412361/35.	
DR	P-PSDB; AAB16523.	
PT		
PI	Identifying a bacteriophage coding region for treating bacterial	
PT	infections comprises identifying a nucleic acid encoding a product that	
XX	inhibits bacteria when a bacteriophage infects a bacterium.	
PS	Disclosure; Page 153; 456pp; English.	
XX		
CC	The present invention describes a method for identifying a bacteriophage	
CC	coding region encoding a product active on an essential bacterial target.	
CC	The method comprises identifying a nucleic acid sequence encoding a gene	
CC	product that provides a bacteria-inhibiting function when an	
CC	uncharacterised bacteriophage infects a pathogenic bacterium. The	
CC	compound active on a target of a bacteriophage inhibitor protein in a	
CC	bacteria is used to treat or prevent a bacterial infection in an animal.	
CC	AAB68243 to AAB69442 and AAB16523 to AAB16954 represent bacteriophage	
CC	nucleotide and protein sequences which are used in the exemplification of	
CC	the present invention. (Updated on 06-AUG-2003 to correct OS field.)	
XX	(Updated on 15-SEP-2003 to standardise OS field)	
XX		
XO	Sequence 714 BP; 312 A; 77 C; 96 G; 229 T; 0 U; 0 Other;	

QY 361 CAAATATATTCAGCTATATTTAAAGAGTTTCATTAATAATACAAAAACAAACA 420  
DB 361 CAAATATATTCAGCTATATTTAAAGAGTTTCATTAATAATACAAAAACAAACA 420  
QY 421 GAATTCATCAAGATATTTTATGATTTATATGATGATGATGATGATGATGAT 480  
DB 421 GAATTCATCAAGATATTTTATGATTTATATGATGATGATGATGATGATGAT 480  
QY 481 AAATTAATTAATGACAGAAACATTAATACATAGATACAGATGATAGTAA 540  
DB 481 AAATTAATTAATGACAGAAACATTAATACATAGATACAGATGATAGTAA 540  
QY 541 AAATTAATTAATGATAGTATGATGATGATGATGATGATGATGATGATGAT 600  
DB 541 AAATTAATTAATGATAGTATGATGATGATGATGATGATGATGATGATGAT 600  
QY 601 ATTAAGAAAGTTTACCCCAAAATTAATAATCCAGTATAGTATGATGAT 660  
DB 601 ATTAAGAAAGTTTACCCCAAAATTAATAATCCAGTATAGTATGATGAT 660  
QY 661 TTACTGATTAATAGATTAATTAATTAATTAATTAATTAATTAATTAAT 714  
DB 661 TTACTGATTAATAGATTAATTAATTAATTAATTAATTAATTAATTAAT 714

RESULT 2  
AA68247/c  
ID AA68247 standard; DNA; 41708 BP.

AC AAA68247;  
DT 15-SEP-2003 (revised)  
DT 06-AUG-2003 (revised)  
DT 27-OCT-2000 (first entry)  
XX  
DE Bacteriophage 77 complete genome sequence.  
XX  
KW Bacteriophage; antimicrobial; genome; identification; antibacterial;  
KW Bacterial growth inhibition; bacterial infection; ds.  
XX  
OS *Staphylococcus aureus*; bacteriophage 77.  
PN WO200032825-A2.  
PD 08-JUN-2000.  
XX  
PF 03-DEC-1999; 99WC-1B002040.  
XX  
PR 03-DEC-1998; 98US-0110992P.  
PR 03-JUN-1999; 99US-00326144.  
PR 28-SEP-1999; 99US-00407804.  
PR 30-SEP-1999; 99US-0157218P.  
PR 01-DEC-1999; 99US-0168777P.  
PR 02-DEC-1999; 99US-00454252.  
XX  
PA (PHAG-) PHAGE TECH INC.

PI Pelletier J, Gros P, Dubow M;  
XX WPI; 2000-412361/35.  
DR  
XX  
PT Identifying a bacteriophage coding region for treating bacterial  
PT infections comprises identifying a nucleic acid encoding a product that  
PT inhibits bacteria when a bacteriophage infects a bacterium.  
XX  
XX  
PS Example 3; Page 141-151; 456pp; English.

CC The present invention describes a method for identifying a bacteriophage  
CC coding region encoding a product active on an essential bacterial target.  
CC The method comprises identifying a nucleic acid sequence encoding a gene  
CC product that provides a bacteria-inhibiting function when an  
CC uncharacterised bacteriophage infects a pathogenic bacterium. The  
CC compound active on a target of a bacteriophage inhibitor protein in a  
CC bacteria is used to treat or prevent a bacterial infection in an animal.  
CC AA68243 to AA69442 and AB16923 to AB16954 represent bacteriophage  
CC nucleotide and protein sequences which are used in the exemplification of  
CC the present invention. (Updated on 06-AUG-2003 to correct OS field.)  
CC (Updated on 15-SEP-2003 to standardise OS field)

Sequence 41708 BP; 15607 A; 5898 C; 8088 G; 12115 T; 0 U; 0 Other;

Query Match 100.0%; Score 714; DB 3; Length 41708;  
Best Local Similarity 100.0%; Pred. No. 9.5e-300;  
Matches 714; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATAGCGCATTAATTAAGAAAGCATTAATTAATTAATTAATTAATTAATTAAT 60  
DB 23982 ATAGCGCATTAATTAAGAAAGCATTAATTAATTAATTAATTAATTAAT 23923  
QY 61 AAAAGTATGATTCAGATATTCATATTAATTAATTAATTAATTAATTAATTAAT 120  
DB 23922 AAAAGTATGATTCAGATATTCATATTAATTAATTAATTAATTAATTAAT 23863  
QY 121 AAAAGTATTCAGAAAGTTTAAACAGAGAAATAGTTTGTAGATTGATTAAC 180  
DB 23862 AAAAGTATTCAGAAAGTTTAAACAGAGAAATAGTTTGTAGATTGATTAAC 23803  
QY 181 GTTAATTAAGAAATTTCTAATTCACCTTGCAATAGTATTAATTAATTAATTAAT 240  
DB 23802 GTTAATTAAGAAATTTCTAATTCACCTTGCAATAGTATTAATTAATTAAT 23743  
QY 241 ACGAGATATAGTAATGTATTCCTATCTTAAGAAACAAAGATTTAAAG 300  
DB 23742 ACGAGATATAGTAATGTATTCCTATCTTAAGAAACAAAGATTTAAAG 23683  
QY 301 ATGATTTGATTTGAATGAGATATTAATTAATTAATTAATTAATTAATTAAT 360  
DB 23682 ATGATTTGATTTGAATGAGATATTAATTAATTAATTAATTAATTAATTAAT 23623  
QY 361 CAAATATATTCAGCTATATTTAAAGAGTTTCATTAATAATACAAAAACAAACA 420  
DB 23622 CAAATATATTCAGCTATATTTAAAGAGTTTCATTAATAATACAAAAACAAACA 23563  
QY 421 GAATTCATCAAGATATTTTATGATTTATATGATGATGATGATGATGATGAT 480





XX Claim 12; 56pp + Sequence Listing; 56pp; German.

PS

XX This invention describes a novel method for determining the degree of

CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a

CC genomic sample of DNA. The sample is treated chemically to convert

CC cytosine (C) but not methylated C, to uracil, then part of the genomic

CC DNA that contains the target C is amplified to form a labeled amplicon.

CC The amplicon is hybridised to two classes, each with at least one member,

CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the

CC degree of hybridisation to both classes is determined from the label on

CC the amplicon. From the ratio of labels hybridised to the two classes of

CC oligomers, the degree of methylation is calculated. The method is used:

CC (1) for diagnosis and/or prognosis of side effects of therapeutic drugs

CC and of a wide range of diseases, e.g. cancer, disorders of the central

CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,

CC particularly by detecting mutations or single nucleotide polymorphisms

CC (SNP's); and (11) for differentiation of cell or tissue types and for

CC investigating cell differentiation. The method allows the methylation

CC status of many C residues to be determined simultaneously. ABQ13410-

CC ABQ54121 represent genomic DNA sequences used to illustrate the method

CC for determining the degree of cytosine methylation described in the

CC disclosure of the invention

XX

SQ Sequence 656 BP; 273 A; 242 C; 69 G; 72 T; 0 U; 0 Other;

Query Match 3.2%; Score 23; DB 6; Length 656;

Best Local Similarity 100.0%; Pred. No. 3.8;

Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 391 TTCGATAAAAATACCAAAAAA 413

DB 77 TTCGATAAAAATACCAAAAAA 99

RESULT 6

ABQ38659

ID ABQ38659 standard; DNA; 712 BP.

XX

AC ABQ38659;

XX

DT 12-JUL-2002 (first entry)

XX

DE oligonucleotide for detecting cytosine methylation SEQ ID NO 25250.

XX

KW Human; cytosine methylation; 5'-CpG-3'; uracil; cytosine; diagnosis;

KW drug; side effect; cancer; central nervous system; cardiovascular;

KW gastrointestinal; respiratory system; single nucleotide polymorphism;

KW SNP; cell differentiation; ds.

XX

OS Homo sapiens.

XX

PN WO200218632-A2.

XX

PD 07-MAR-2002.

XX

PF 01-SEP-2001; 2001WO-BP010074.

XX

PR 01-SEP-2000; 2000DE-01043826.

PR 05-SEP-2000; 2000DE-01044543.

XX

PA (EPIG-) EPIGENOMICS AG.

XX

PI Olek A, Piepenbrock C, Berlin K, Guettig D;

XX

DR WPI; 2002-371829/40.

XX

PR Determining the degree of cytosine methylation in genomic DNA, useful for

PR diagnosis and prognosis, comprises selective hybridization of amplicons

PR from chemically treated DNA.

XX

PS Claim 12; 56pp + Sequence Listing; 56pp; German.

XX

CC This invention describes a novel method for determining the degree of

CC methylation of a particular cytosine in a motif 5'-CpG-3', present in a

CC genomic sample of DNA. The sample is treated chemically to convert

CC cytosine (C) but not methylated C, to uracil, then part of the genomic

CC DNA that contains the target C is amplified to form a labeled amplicon.

CC The amplicon is hybridised to two classes, each with at least one member,

CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the

CC degree of hybridisation to both classes is determined from the label on

CC the amplicon. From the ratio of labels hybridised to the two classes of

CC oligomers, the degree of methylation is calculated. The method is used:

CC (1) for diagnosis and/or prognosis of side effects of therapeutic drugs

CC and of a wide range of diseases, e.g. cancer, disorders of the central

CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,

CC particularly by detecting mutations or single nucleotide polymorphisms

CC (SNP's); and (11) for differentiation of cell or tissue types and for

CC investigating cell differentiation. The method allows the methylation

CC status of many C residues to be determined simultaneously. ABQ13410-

CC ABQ54121 represent genomic DNA sequences used to illustrate the method

CC for determining the degree of cytosine methylation described in the

CC disclosure of the invention

XX

SQ Sequence 712 BP; 274 A; 276 C; 80 G; 82 T; 0 U; 0 Other;

Query Match 3.2%; Score 23; DB 6; Length 712;

Best Local Similarity 100.0%; Pred. No. 3.7;

Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 391 TTCGATAAAAATACCAAAAAA 413

DB 167 TTCGATAAAAATACCAAAAAA 189

RESULT 7

ABQ38658/c

ID ABQ38658 standard; DNA; 712 BP.

XX

AC ABQ38658;

XX

DT 12-JUL-2002 (first entry)

XX

DE oligonucleotide for detecting cytosine methylation SEQ ID NO 25249.

XX Human; cytosine methylation; 5'-QpG-3'; uracil; cytosine; diagnosis;  
 KW drug; side effect; cancer; central nervous system; cardiovascular;  
 KW gastrointestinal; respiratory system; single nucleotide polymorphism;  
 KW SNP; cell differentiation; da.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W0200218632-A2.  
 XX  
 PD 07-MAR-2002.  
 XX  
 PF 01-SEP-2001; 2001WO-EP010074.  
 XX  
 PR 01-SEP-2000; 2000DE-01043826.  
 PR 03-SEP-2000; 2000DE-01044543.  
 XX  
 PA (EPIC-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K, Guettig D;  
 DR WPI; 2002-371829/40.  
 XX  
 PT Determining the degree of cytosine methylation in genomic DNA, useful for  
 PT diagnosis and prognosis, comprises selective hybridization of amplicons  
 PT from chemically treated DNA.  
 XX  
 PS Claim 12; 56pp + Sequence Listing; 56pp; German.  
 XX  
 CC This invention describes a novel method for determining the degree of  
 CC methylation of a particular cytosine in a motif 5'-QpG-3', present in a  
 CC genomic sample of DNA. The sample is treated chemically to convert in a  
 CC cytosine (C) but not methylated C, to uracil, then part of the genomic  
 CC DNA that contains the target C is amplified to form a labeled amplicon.  
 CC The amplicon is hybridised to two classes, each with at least one member,  
 CC of oligonucleotides and/or peptide-nucleic acid (PNA) oligomers and the  
 CC degree of hybridisation to both classes is determined from the label on  
 CC the amplicon. From the ratio of labels hybridised to the two classes of  
 CC oligomers, the degree of methylation is calculated. The method is used:  
 CC (1) for diagnosis and/or prognosis of side effects of therapeutic drugs  
 CC and of a wide range of diseases, e.g. cancer, disorders of the central  
 CC nervous, cardiovascular, gastrointestinal and respiratory systems etc.,  
 CC particularly by detecting mutations or single nucleotide polymorphisms  
 CC (SNP's); and (11) for differentiation of cell or tissue types and for  
 CC investigating cell differentiation. The method allows the methylation  
 CC status of many C residues to be determined simultaneously. ABQ13410-  
 CC ABQ54121 represent genomic DNA sequences used to illustrate the method  
 CC for determining the degree of cytosine methylation described in the  
 CC disclosure of the invention  
 XX  
 SQ Sequence 712 BP; 82 A; 80 C; 276 G; 274 T; 0 U; 0 Other;  
 Query Match 3.2%; Score 23; DB 6; Length 712;  
 Best Local Similarity 100.0%; Pred. No. 3.7;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 391 TTCATTAATAATACCAAAAAA 413

DB 546 TTAGATTAATAATACCAAAAAA 524  
 RESULT 8  
 ID ABL33621 standard; DNA; 6254 BP.  
 XX  
 AC ABL33621;  
 XX  
 DT 26-MAR-2002 (first entry)  
 XX  
 DE Human immune system associated gene SEQ ID NO: 1594.  
 XX  
 KW Human; immune system disease; cytosine methylation; antileukemic;  
 KW antileukosclerotic; antineoplastic; cytosine; neoplastic;  
 KW neuroprotective; anti-HIV; anticonvulsant; ophthalmological;  
 KW antirheumatic; antileukemic; antidiabetic; antiproliferative;  
 KW antileukemic; cancer; eye disease; arteriosclerosis; anaemia;  
 KW acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy;  
 KW neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease; gene;  
 da.  
 XX  
 OS Homo sapiens.  
 XX  
 PN W0200200928-A2.  
 XX  
 PD 03-JAN-2002.  
 XX  
 PF 02-JUL-2001; 2001WO-EP007537.  
 XX  
 PR 30-JUN-2000; 2000DE-01032529.  
 PR 01-SEP-2000; 2000DE-01043826.  
 XX  
 PA (EPIC-) EPIGENOMICS AG.  
 XX  
 PI Olek A, Piepenbrock C, Berlin K;  
 DR WPI; 2002-130909/17.  
 XX  
 PT Nucleic acid comprising fragment of chemically modified gene, useful for  
 PT diagnosis and treatment of diseases associated with abnormal cytosine  
 PT methylation.  
 XX  
 PS Claim 1; SEQ ID NO 1594; 32pp + Sequence Listing; German.  
 XX  
 CC The present invention provides a number of human immune system associated  
 CC genes which are modified by the methylation of cytosines. The sequences  
 CC can be used in the diagnosis and treatment of immune system disorders,  
 CC including eye diseases such as retinopathy, neovascular glaucoma and  
 CC macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid  
 CC leukaemia, Alzheimer's disease, AIDS, epilepsy, neurofibromatosis,  
 CC rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel  
 CC diseases. The present sequence is a gene of the invention  
 XX  
 SQ Sequence 6254 BP; 1867 A; 44 C; 1323 G; 3020 T; 0 U; 0 Other;

Query Match 3.2%; Score 23; DB 6; Length 6254;  
Best Local Similarity 100.0%; Pred. No. 3.1;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
OY 328 TATTAAAGATGTTTAAATTT 350  
|||||  
DB 957 TATTAAAGATGTTTAAATTT 979

RESULT 9  
ABL33550  
ID ABL33550 standard; DNA; 6075 BP.

AC ABL33550;

DT 26-MAR-2002 (first entry)

DE Human immune system associated gene SEQ ID NO: 1523.

KW Human; immune system disease; cytosine methylation; antiasthmatic;  
KW antiarteriosclerotic; antiamebic; cytosolic; neutrotic;  
KW neuroprotective; anti-HIV; antiviral; ophthalmological;  
KW antitubercular; antileishmanial; antidiabetic; antiparasitic;  
KW antineoplastic; cancer; eye disease; arteriosclerosis; anaemia;  
KW acute myeloid leukaemia; Alzheimer's disease; AIDS; epilepsy;  
KW neurofibromatosis; rheumatoid arthritis; psoriasis; bowel disease; gene;  
KW de.

OS Homo sapiens.

PN WO200200928-A2.

PD 03-JAN-2002.

PF 02-JUL-2001; 2001WO-EP007537.

PR 30-JUN-2000; 2000DE-01032529.

PR 01-SEP-2000; 2000DE-01043826.

PA (EPIC-) EPIGENOMICS AG.

PI Olek A, Piepenbrock C, Berlin K;

DR WPI; 2002-130909/17.

PT Nucleic acid comprising fragment of chemically modified gene, useful for  
PT diagnosis and treatment of diseases associated with abnormal cytosine  
PT methylation.

PS Claim 1; SEQ ID NO 1523; 32pp + Sequence Listing; German.

CC The present invention provides a number of human immune system associated  
CC genes which are modified by the methylation of cytosines. The sequences  
CC can be used in the diagnosis and treatment of immune system disorders,  
CC including eye diseases such as retinopathy, neovascular glaucoma and  
CC macular degeneration, arteriosclerosis, anaemia, cancer, acute myeloid  
CC leukaemia, Alzheimer's disease, AIDS, epilepsy, neurofibromatosis,

CC rheumatoid arthritis, psoriasis and inflammatory/ulcerative bowel  
CC diseases. The present sequence is a gene of the invention  
XX  
SQ Sequence 6075 BP; 1318 A; 146 C; 1645 G; 2966 T; 0 U; 0 Other;

Query Match 3.1%; Score 22; DB 6; Length 6075;  
Best Local Similarity 100.0%; Pred. No. 8.3;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 526 ATTGATAGGTAAAAAATTAA 547  
|||||  
DB 2292 ATTGATAGGTAAAAAATTAA 2313

RESULT 10  
AAA4336/c  
ID AAA4336 standard; cDNA; 615 BP.

AC AAA4336;

DT 21-AUG-2000 (first entry)

DE Xenopus secreted expressed sequence tag SEQ ID NO:2076.

KW Human; mouse; xenopus; rat; secreted expressed sequence tag; SEST;  
KW expressed sequence tag; EST; probe; chemotactic; proliferative;  
KW immunomodulatory; hematopoietic; chemokinetic; analgesic; haemostatic;  
KW thrombolytic; antineoplastic; cytosolic; antibacterial; antifungal;  
KW antiviral; antidiabetic; antiasthmatic; vulnerary; antiparasitic;  
KW antitumor; osteopathic; neuroprotective; neutrotic; antiparasitic;  
KW cerebroprotective; anticonvulsant; antidepressant; gene therapy; vaccine;  
KW autoimmune disorder; multiple sclerosis; allergic condition;  
KW insulin dependent diabetes; asthma; myeloid cell deficiency; ulcer;  
KW lymphoid cell deficiency; burn; osteoporosis; osteoarthritis;  
KW central nervous system disorder; Alzheimer's disease; stroke;  
KW Parkinson's disease; Huntington's disease; coagulation disorder;  
KW hemophilia; thrombosis; inflammatory disorder; Crohn's disease; tumour;  
KW infection; depression; psoriasis; ss.

OS Xenopus sp.

PN WO200021990-A1.

PD 20-APR-2000.

PF 15-OCT-1999; 99WO-US024205.

PR 15-OCT-1998; 98US-0104435P.

PA (GENE ) GENETICS INST INC.

PI Jacobs K, McCoy JM, Lavallee ER, Collins-Racie LA, Evans C;  
PI Merberg D, Treacy M;

DR WPI; 2000-317937/27.

PT Isolated polynucleotides, and encoded proteins, comprising secreted



PT expressed sequence tags (ESTs), useful for treating various disorders  
PT such as autoimmune, infectious, and central nervous system disorders.  
XX  
PS Claim 1; Page 594; 618pp; English.  
XX  
CC AAA41261 to AAA43419 represent specifically claimed secreted expressed  
CC sequence tags (ESTs), isolated from human, mouse, xenopus and rat tissue  
CC sources. The ESTs can have a range of activities depending on the  
CC tissues they were isolated from. The activities include: chemotactic;  
CC proliferative; immunomodulatory; haematopoietic; chemokine; analgesic;  
CC haemostatic; thrombolytic; anti-inflammatory; cytostatic; antibacterial;  
CC antifungal; antiviral; antidiabetic; antisthmatic; vulnereary; antitumor;  
CC osteoprotective; neuroprotective; nootropic; antiparkinsonian; antipruritic;  
CC cerebroprotective; anticoagulant; and antidepressant. The ESTs can be  
CC used for gene therapy and in vaccines. The ESTs are useful as probes for  
CC the identification and isolation of full-length cDNAs and genomic DNA  
CC molecules which correspond to the ESTs. Proteins encoded by the ESTs  
CC are useful in assays for determining biological activity and relating  
CC antibodies. They may be useful for treatment of autoimmune disorders  
CC (multiple sclerosis, insulin dependent diabetes), allergic conditions  
CC (asthma), myeloid or lymphoid cell deficiencies, wounds, burns, ulcers,  
CC osteoporosis, osteoarthritis, central nervous system disorders  
CC (Alzheimer's, Parkinson's, Huntington's disease, stroke), coagulation  
CC disorders (haemophilia, thrombosis), inflammatory disorders (Crohn's  
CC disease, tumours, bacterial, fungal or viral infections, depression and  
CC psoriasis. AAA43420 to AAA43425 represent linker variants which are given  
CC in the exemplification of the present invention  
XX  
SQ Sequence 615 BP; 142 A; 127 C; 130 G; 216 T; 0 U; 0 Other;  
Query Match 2.9%; Score 21; DB 3; Length 615;  
Best Local Similarity 100.0%; Pred. No. 28;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 407 AAAAAAAAAACAGAAATCA 427  
DB 400 AAAAAAAAAACAGAAATCA 380  
RESULT 11  
AB216393  
ID AB216393 standard; DNA; 2000 BP.  
XX  
AC AB216393;  
XX  
DT 21-JAN-2003 (first entry)  
XX  
DE Arabidopsis thaliana stress regulated gene SEQ ID NO 4198.  
XX  
KW Arabidopsis thaliana; plant; gene; stress; transgenic; ds.  
XX  
OS Arabidopsis thaliana.  
XX  
PN W0200216655-A2.  
XX  
PD 28-FEB-2002.  
XX

PF 24-AUG-2001; 2001WO-US026685.  
XX  
XX 24-AUG-2000; 2000US-0227866P.  
PR 26-JAN-2001; 2001US-0264647P.  
PR 22-JUN-2001; 2001US-0300111P.  
XX  
PA (SCRI ) SCRIPTS RES INST.  
PA (SYGN ) SYNGENTA PARTICIPATIONS AG.  
XX  
PI Harper JF, Kreps J, Wang X, Zhu T;  
XX  
DR WPI; 2002-304127/34.  
XX  
PT Identifying a stress condition to which a plant cell has been exposed and  
PT producing plants with increased tolerance to these abiotic stresses.  
XX  
PS Claim 144; SEQ ID NO 4198; 577bp + Sequence listing; English.  
XX  
CC The invention relates to identifying a stress condition to which a plant  
CC cell has been exposed, comprising: (a) contacting nucleic acid  
CC representative of expressed polynucleotides in the plant cell with an  
CC array or probes representative of the plant cell genome; and (b)  
CC detecting a profile of expressed polynucleotides in the plant cell  
CC characteristic of a stress response. The method is useful in the  
CC production of transgenic plants, cells and seeds and in producing plants  
CC with increased tolerance to abiotic stress. The present sequence is that  
CC of an Arabidopsis thaliana stress regulated gene (AB212196-AB217574) used  
CC in methods of the invention. Note: The sequence data for this patent is  
CC not represented in the printed specification but is based on sequence  
CC information supplied to Derwent by the European Patent Office  
XX  
SQ Sequence 2000 BP; 718 A; 262 C; 272 G; 748 T; 0 U; 0 Other;  
Query Match 2.9%; Score 21; DB 6; Length 2000;  
Best Local Similarity 100.0%; Pred. No. 25;  
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 475 GAAATTAATTAATTAATTAAT 495  
DB 48 GAAATTAATTAATTAATTAAT 68  
RESULT 12  
AAT90505  
ID AAT90505 standard; DNA; 5156 BP.  
XX  
AC AAT90505;  
XX  
DT 17-OCT-2003 (revised)  
XX  
DT 29-JAN-1998 (first entry)  
XX  
DE Arabidopsis thaliana ferulate-5-hydroxylase genomic DNA.  
XX  
KW Ferulate-5-hydroxylase; lignin; delignification; pulp; paper; feedstock;  
KW transgenic plant; alfalfa; Medicago; rice; Oryza; maize; Zea mays;  
KW oilseed rape; Brassica; forage grass; fahl gene; tobacco; Nicotiana;  
KW eucalyptus; pine; Pinus; spruce; Picea; poplar; Populus;  
XX

crop improvement; Arabidopsis thaliana; ss.

Arabidopsis thaliana; ecotype Landsberg erecta.

Key Location/Qualifiers

exon 2487..3002

FT /tag= b

FT /number= 1

FT CDS 2587..4522

FT /tag= a

FT /note= "includes introns"

FT Intron 3003..3130

FT /tag= c

FT /number= 1

FT exon 3131..3557

FT /tag= d

FT /number= 2

FT Intron 3558..3902

FT /tag= e

FT /number= 2

FT exon 3903..4522

FT /tag= f

FT /number= 3

WO9723599-A2.

03-JUL-1997.

19-DEC-1996; 96WO-US020094.

22-DEC-1995; 95US-0009119P.

PR 14-MAR-1996; 96US-0013388P.

PA (DUPO ) DU PONT DE NEMOURS & CO E. I.

PA (PURD ) PURDUE RES FOUND.

XX Chapple C;

PI WPI: 1997-351042/32.

DR P-PSDB; AAW26640.

XX

XX Nucleic acid encoding plant ferulate-5-hydroxylase - useful for altering

PT guaiacyl:syringyl lignin monomer ratio in plants, to increase chemical

PT delignification in paper and pulp making or to increase digestibility of

PT feedstocks.

XX

PS Claim 2; Page 29-31; 43pp; English.

XX

CC This genomic DNA sequence includes exons that encode the ferulate-5-

CC hydroxylase (F5H) (see AAW26640) of Arabidopsis thaliana. It comprises a

CC HindIII-XhoI fragment of genomic clone pBIC20-F5H, which was isolated

CC from a genomic library generated in binary cosmid vector pBIC20 by

CC screening with a F5H cDNA insert (see AAT90504). A claimed chimeric gene

CC that causes an altered guaiacyl:syringyl lignin monomer ratio in a

CC transformed plant comprises the F5H cDNA or genomic clone linked either

CC in the sense or antisense direction to at least one regulatory sequence.

CC The gene allows the alteration of a plant's lignin content, especially to

CC increase the syringyl lignin content. This renders the lignin more

CC susceptible to chemical delignification of use to the paper and pulp

CC industries. Alteration of the lignin content of grasses increases the

CC digestibility for animal feedstocks. Suitable host plants include

CC alfalfa, rice, maize, oilseed rape, forage grasses, tobacco, and tree

CC crops such as eucalyptus, pine, spruce and poplar. (Updated on 17-OCT-2003

CC to standardise os field)

XX

SO Sequence 5156 BP; 1670 A; 827 C; 907 G; 1752 T; 0 U; 0 Other;

Query Match 2.9%; Score 21; DB 2; Length 5156;

Best Local Similarity 100.0%; Pred. No. 23;

Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 475 GAAATTAATTAATTAATTAAT 495

DB 537 GAAATTAATTAATTAATTAAT 557

RESULT 13

AAV10238

ID AAV10238 standard; cDNA; 5156 BP.

XX

AC AAV10238;

XX

DT 20-JUL-1998 (first entry)

XX

DE Arabidopsis ferulate-5-hydroxylase genomic DNA.

XX

XX Ferulate-5-hydroxylase; cinnamate-4-hydroxylase;

XX tissue-specific promoter; lignin, syringyl, delignification; pulping;

KW transgenic plant; ss.

XX

XX Arabidopsis thaliana.

XX

OS Arabidopsis thaliana.

XX

XX Key Location/Qualifiers

FT CDS 2487..4522

FT /tag= a

FT /note= "contains introns"

FT Intron 2997..3125

FT /tag= b

FT /number= 1

FT Intron 3557..3901

FT /tag= c

FT /number= 2

XX

XX WO9803535-A1.

XX

XX 29-JAN-1998.

XX

XX 18-JUL-1997; 97WO-US012624.

XX

XX 19-JUL-1996; 96US-0022228P.

PR 16-DEC-1996; 96US-0032908P.

XX

XX (PURD ) PURDUE RES FOUND.



```

Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      330 TTTAAGATTGTTTTAAATT 350
        |||||TTTTTTTTTTTTTTTT
Db       2634 TTTAAGATTGTTTTAAATT 2654

Search completed: October 15, 2004, 00:15:17
Job time : 517.316 secs

```

OM nucleic - nucleic search, using sm model

Run on: October 14, 2004, 22:42:59 ; Search time 3337.09 Seconds

(without alignments)  
6389.277 Million cell updates/sec

SUMMARIES

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

28: gb\_gss1:.\*  
29: gb\_gss2:.\*

Title: US-09-407-804A-4  
Perfect score: 714  
Sequence: 1 atgacgcctacatcagaaac.....agatccctcgtataagatga 714  
Scoring table: OLIGO\_NUC  
Gapop 60.0 , Gapext 60.0  
Searched: 27513289 seqs, 14931090276 residues  
Word size : 0  
Total number of hits satisfying chosen parameters: 55026578  
Minimum DB seq length: 0  
Maximum DB seq length: 200000000  
Post-processing: listing first 1000 summaries  
Database :  
EST:.\*  
1: em\_estba:.\*  
2: em\_estbm:.\*  
3: em\_estln:.\*  
4: em\_estmu:.\*  
5: em\_estov:.\*  
6: em\_estpl:.\*  
7: em\_estro:.\*  
8: em\_estc:.\*  
9: gb\_est1:.\*  
10: gb\_est2:.\*  
11: gb\_est3:.\*  
12: gb\_est4:.\*  
13: gb\_est5:.\*  
14: gb\_est6:.\*  
15: em\_estfun:.\*  
16: em\_estom:.\*  
17: em\_gss\_hum:.\*  
18: em\_gss\_inv:.\*  
19: em\_gss\_pln:.\*  
20: em\_gss\_vrc:.\*  
21: em\_gss\_fun:.\*  
22: em\_gss\_mam:.\*  
23: em\_gss\_mus:.\*  
24: em\_gss\_pro:.\*  
25: em\_gss\_rtd:.\*  
26: em\_gss\_phg:.\*  
27: em\_gss\_vrl:.\*

Result		Query		DB	ID	Description
No.	Score	Match	Length			
1	23	3.2	407	10	BE115451	BE115451 UI-R-BS1-
2	23	3.2	420	28	A2263506	A2263506 RPTC-23-1
3	23	3.2	687	28	B2728592	B2728592 OGFBS507M
4	23	3.2	805	29	CG094526	CG094526 PUFTR71TD
5	23	3.2	821	29	CG060667	CG060667 PUCM74TD
6	23	3.2	869	29	CG094522	CG094522 PUFTR71TD
7	23	3.2	913	29	CG083261	CG083261 PUFQD39TD
8	23	3.2	913	29	CG204442	CG204442 PUCUB5TD
9	23	3.2	940	29	CG083259	CG083259 PUFQD39TD
10	22	3.1	141	10	BE184302	BE184302 CM0-HR067
11	22	3.1	461	28	BH040485	BH040485 RPTC-24-3
12	22	3.1	529	10	AW828209	AW828209 raef-h08-y
13	22	3.1	552	12	BI501692	BI501692 rnc3h02-y
14	22	3.1	582	28	BH307917	BH307917 CH230-4U1
15	21	2.9	197	12	BJ084733	BJ084733 BJ084733
16	21	2.9	269	9	AV265805	AV265805 AV265805
17	21	2.9	332	28	BH649846	BH649846 BONA777R
18	21	2.9	411	10	BG037602	BG037602 dc53d05-y
19	21	2.9	441	28	A2002078	A2002078 RPTC-23-3
20	21	2.9	444	29	CE020157	CE020157 tigr-gss-
21	21	2.9	479	12	BI448417	BI448417 dac75b09-y
22	21	2.9	503	9	AU265829	AU265829 AU265829
23	21	2.9	504	13	BO631520	BO631520 i118e12-y
24	21	2.9	510	29	CG962903	CG962903 MBEG126TF
25	21	2.9	582	9	AU053283	AU053283 AU053283
26	21	2.9	605	9	AU267784	AU267784 AU267784
27	21	2.9	618	12	BP117088	BP117088 BP117088
28	21	2.9	637	29	CC769429	CC769429 CH240-74B
29	21	2.9	642	14	CA995274	CA995274 r926g06-y
30	21	2.9	702	12	BJ082244	BJ082244 B2082244
31	21	2.9	716	28	B2082440	B2082440 i1641h05-y
32	21	2.9	721	28	B2064589	B2064589 i1d82e03-y
33	21	2.9	765	10	BE124819	BE124819 601756824
34	21	2.9	815	29	CC584265	CC584265 CH240-380
35	21	2.9	843	13	BU464162	BU464162 603366402
36	21	2.9	900	14	CD327911	CD327911 AGNCCOURT
37	21	2.9	1039	28	CC192247	CC192247 CH261-700
38	21	2.9	1195	28	BH860759	BH860759 ORNL260 P
39	20	2.8	128	28	BH791501	BH791501 SALK_0600
40	20	2.8	140	28	BH903455	BH903455 SALK_1026
41	20	2.8	140	28	B2665188	B2665188 SALK_108
42	20	2.8	216	9	AV261854	AV261854 AV261854
43	20	2.8	218	29	CG616858	CG616858 OST309561
44	20	2.8	220	10	BB048955	BB048955 BB048955
45	20	2.8	228	9	AV556344	AV556344 AV556344

46	c	102	20	2.8	240	9	AJ483861	AJ483861	c	103	20	2.8	620	13	BM172544	BM172544
47	c	101	20	2.8	240	9	AU074594	AU074594	c	104	20	2.8	621	13	BM172551	BM172551
48	c	100	20	2.8	273	10	BM223451	BM223451	c	105	20	2.8	627	28	BE322748	BE322748
49	c	99	20	2.8	285	29	CE111663	CE111663	c	106	20	2.8	632	28	BE442268	BE442268
50	c	98	20	2.8	309	9	AU037569	AU037569	c	107	20	2.8	635	28	BM009628	BM009628
51	c	97	20	2.8	317	28	AZ666028	AZ666028	c	108	20	2.8	640	13	BM498356	BM498356
52	c	96	20	2.8	326	14	N96340	N96340	c	109	20	2.8	643	13	BM301705	BM301705
53	c	95	20	2.8	339	9	AV530832	AV530832	c	110	20	2.8	644	9	AV979863	AV979863
54	c	94	20	2.8	340	10	AMS68885	AMS68885	c	111	20	2.8	648	13	BM275789	BM275789
55	c	93	20	2.8	352	29	CG605339	CG605339	c	112	20	2.8	653	10	BE037176	BE037176
56	c	92	20	2.8	359	29	CG665457	CG665457	c	113	20	2.8	657	9	AV963162	AV963162
57	c	91	20	2.8	375	14	A1171488	A1171488	c	114	20	2.8	658	13	BM219334	BM219334
58	c	90	20	2.8	380	28	BE059122	BE059122	c	115	20	2.8	659	13	BM269427	BM269427
59	c	89	20	2.8	380	28	BE020787	BE020787	c	116	20	2.8	665	28	AQ254309	AQ254309
60	c	88	20	2.8	414	12	BJ370266	BJ370266	c	117	20	2.8	668	28	A2194180	A2194180
61	c	87	20	2.8	420	10	BF908658	BF908658	c	118	20	2.8	668	29	CE209879	CE209879
62	c	86	20	2.8	431	13	BM301699	BM301699	c	119	20	2.8	684	12	BM160765	BM160765
63	c	85	20	2.8	432	28	BF288468	BF288468	c	120	20	2.8	689	29	AQ180127	AQ180127
64	c	84	20	2.8	432	28	A2262777	A2262777	c	121	20	2.8	693	29	CE479384	CE479384
65	c	83	20	2.8	432	28	BM1928	BM1928	c	122	20	2.8	695	9	A1172467	A1172467
66	c	82	20	2.8	434	13	BY686442	BY686442	c	123	20	2.8	697	29	BM176715	BM176715
67	c	81	20	2.8	447	9	A1011278	A1011278	c	124	20	2.8	700	28	BH945085	BH945085
68	c	80	20	2.8	450	9	BO790475	BO790475	c	125	20	2.8	708	28	BZ011671	BZ011671
69	c	79	20	2.8	455	13	BO790475	BO790475	c	126	20	2.8	709	28	BH441283	BH441283
70	c	78	20	2.8	457	12	BI615785	BI615785	c	127	20	2.8	710	28	BE606084	BE606084
71	c	77	20	2.8	473	14	CD081287	CD081287	c	128	20	2.8	713	29	CE472105	CE472105
72	c	76	20	2.8	473	12	BJ521908	BJ521908	c	129	20	2.8	714	28	BH794282	BH794282
73	c	75	20	2.8	475	12	BJ521942	BJ521942	c	130	20	2.8	715	29	CG950584	CG950584
74	c	74	20	2.8	486	28	BH325289	BH325289	c	131	20	2.8	720	29	CG994007	CG994007
75	c	73	20	2.8	493	10	BF284508	BF284508	c	132	20	2.8	727	13	BU724419	BU724419
76	c	72	20	2.8	493	28	BH775458	BH775458	c	133	20	2.8	728	29	CC818939	CC818939
77	c	71	20	2.8	500	28	A2341364	A2341364	c	134	20	2.8	731	29	BM137614	BM137614
78	c	70	20	2.8	502	28	BH744314	BH744314	c	135	20	2.8	740	13	CA130429	CA130429
79	c	69	20	2.8	506	14	CG391898	CG391898	c	136	20	2.8	741	29	CG819000	CG819000
80	c	68	20	2.8	508	13	BU779796	BU779796	c	137	20	2.8	744	29	CG868808	CG868808
81	c	67	20	2.8	515	29	CC744356	CC744356	c	138	20	2.8	751	29	CG439884	CG439884
82	c	66	20	2.8	526	13	BO451161	BO451161	c	139	20	2.8	757	28	AQ915362	AQ915362
83	c	65	20	2.8	531	28	BZ318945	BZ318945	c	140	20	2.8	767	28	BM241445	BM241445
84	c	64	20	2.8	534	28	BH714810	BH714810	c	141	20	2.8	777	14	CD512136	CD512136
85	c	63	20	2.8	540	13	BO989881	BO989881	c	142	20	2.8	779	13	BU748137	BU748137
86	c	62	20	2.8	541	14	CB395711	CB395711	c	143	20	2.8	802	28	A2139436	A2139436
87	c	61	20	2.8	541	14	CB395724	CB395724	c	144	20	2.8	803	29	CNS027FD	CNS027FD
88	c	60	20	2.8	544	28	B2177850	B2177850	c	145	20	2.8	822	28	CC060419	CC060419
89	c	59	20	2.8	567	9	AV983005	AV983005	c	146	20	2.8	823	14	CD657515	CD657515
90	c	58	20	2.8	568	12	BF016875	BF016875	c	147	20	2.8	824	28	BZ397902	BZ397902
91	c	57	20	2.8	568	13	CA035099	CA035099	c	148	20	2.8	825	29	CNS0420Y	CNS0420Y
92	c	56	20	2.8	572	29	CE035692	CE035692	c	149	20	2.8	845	28	AZ547968	AZ547968
93	c	55	20	2.8	576	28	BE630663	BE630663	c	150	20	2.8	855	28	BH148928	BH148928
94	c	54	20	2.8	576	28	BE630760	BE630760	c	151	20	2.8	865	28	AZ543500	AZ543500
95	c	53	20	2.8	592	28	BE630661	BE630661	c	152	20	2.8	872	28	BH161045	BH161045
96	c	52	20	2.8	592	28	BE630758	BE630758	c	153	20	2.8	875	28	AZ547085	AZ547085
97	c	51	20	2.8	594	14	CA162639	CA162639	c	154	20	2.8	877	29	BX156958	BX156958
98	c	50	20	2.8	600	9	AV866040	AV866040	c	155	20	2.8	886	28	AZ528847	AZ528847
99	c	49	20	2.8	605	29	CG913751	CG913751	c	156	20	2.8	892	29	CNS035K3	CNS035K3
100	c	48	20	2.8	612	14	CB439219	CB439219	c	157	20	2.8	899	28	BH139769	BH139769
101	c	47	20	2.8	614	29	BM21606	BM21606	c	158	20	2.8	910	28	AZ533274	AZ533274
102	c	46	20	2.8	614	29	BM21606	BM21606	c	159	20	2.8	919	28	BH162019	BH162019

160	20	2.8	922	29	CG821679	CG821679	SOVFG12TH
c 161	20	2.8	924	28	BH134455	BH134455	ENTPC35TF
c 162	20	2.8	929	28	A2536629	A2536629	ENTEL8TF
c 163	20	2.8	1006	28	B2461604	B2461604	BONCE37TF
c 164	20	2.8	1014	29	CNS045PC	AL275673	Tetradon
c 165	20	2.8	1016	28	CC295054	CC295054	CH261-103
c 166	20	2.8	1052	28	CC299800	CC299800	CH261-29F
c 167	20	2.8	1054	28	CC252485	CC252485	CH261-180
c 168	20	2.8	1056	28	CC289323	CC289323	CH261-9A1
c 169	20	2.8	1083	28	CC294671	CC294671	CH261-29B
c 170	20	2.8	1151	14	CM232059	CM232059	ILLUMGEN
c 171	20	2.8	1189	28	B11631	B11631	F4E20-596.1
c 172	20	2.7	117	13	BO504400	BO504400	EST611815
c 173	19	2.7	159	13	C93393	C93393	C93393
c 174	19	2.7	163	12	BP920062	BP920062	BP520062
c 175	19	2.7	171	12	BP110639	BP110639	BP110639
c 176	19	2.7	196	9	AV379414	AV379414	AV379414
c 177	19	2.7	203	29	BK202617	BK202617	Danlo ref
c 178	19	2.7	208	10	BB351170	BB351170	BB351170
c 179	19	2.7	208	29	AL766117	AL766117	Arbldops
c 180	19	2.7	225	29	CA482419	CA482419	tl9f-gsa-
c 181	19	2.7	228	10	AM727519	AM727519	GA_Ea001
c 182	19	2.7	229	10	AM466425	AM466425	he37g12.x
c 183	19	2.7	230	12	BP520251	BP520251	BP520251
c 184	19	2.7	234	10	BB334288	BB334288	BB334288
c 185	19	2.7	237	10	BB078492	BB078492	BB078492
c 186	19	2.7	239	9	AL218960	AL218960	z702n07.s
c 187	19	2.7	239	10	BB095758	BB095758	BB095758
c 188	19	2.7	240	9	AU074851	AU074851	AU074851
c 189	19	2.7	240	13	BW005725	BW005725	BW005725
c 190	19	2.7	243	10	BB076700	BB076700	BB076700
c 191	19	2.7	249	9	AL688215	AL688215	ts56f07.x
c 192	19	2.7	265	9	AL880542	AL880542	AL880542
c 193	19	2.7	265	10	AL890032	AL890032	AL890032
c 194	19	2.7	265	10	BB178019	BB178019	BB178019
c 195	19	2.7	268	10	BF416195	BF416195	UI-R-CAL-
c 196	19	2.7	278	9	AL852309	AL852309	AL852309
c 197	19	2.7	289	9	AA360820	AA360820	EST70033
c 198	19	2.7	284	29	CG979141	CG979141	CH240.171
c 199	19	2.7	300	9	AV200618	AV200618	AV200618
c 200	19	2.7	300	12	BM161949	BM161949	EST564461
c 201	19	2.7	300	13	C35274	C35274	C35274
c 202	19	2.7	300	13	C35215	C35215	C35215
c 203	19	2.7	300	13	C35124	C35124	C35124
c 204	19	2.7	310	12	BI441504	BI441504	ics5a11.y
c 205	19	2.7	320	10	BB132470	BB132470	BB132470
c 206	19	2.7	325	9	AV216258	AV216258	AV216258
c 207	19	2.7	325	10	BB520928	BB520928	BB520928
c 208	19	2.7	325	14	D64416	D64416	CETK052A6R
c 209	19	2.7	328	10	BB204271	BB204271	BB204271
c 210	19	2.7	328	10	BB057293	BB057293	sn01b05.y
c 211	19	2.7	333	29	CA493421	CA493421	tl9f-gsa-
c 212	19	2.7	334	14	CA899525	CA899525	B0192F08-
c 213	19	2.7	338	29	CE718067	CE718067	tl9f-gsa-
c 214	19	2.7	341	12	BI744787	BI744787	FX4c2D03.y
c 215	19	2.7	344	12	BB735597	BB735597	FX4c12.y
c 216	19	2.7	346	14	CD66546	CD66546	ECS76f26
217	19	2.7	352	29	CNS000ET	AL083112	Arbldops
c 218	19	2.7	353	14	CD132665	CD132665	MGL-0024U
c 219	19	2.7	359	13	BU493385	BU493385	Nb_ADRG
c 220	19	2.7	363	12	BU397424	BU397424	B3397424
c 221	19	2.7	363	13	BO613275	BO613275	rd04002.y
c 222	19	2.7	366	9	AV208216	AV208216	AV208216
c 223	19	2.7	366	12	BI142805	BI142805	FX4c03.y
c 224	19	2.7	366	12	BI744940	BI744940	FX4c01.y
c 225	19	2.7	368	12	BP509723	BP509723	BP509723
c 226	19	2.7	369	12	BP520627	BP520627	BP520627
c 227	19	2.7	369	13	BY215409	BY215409	BY215409
c 228	19	2.7	372	9	AV678665	AV678665	AV678665
c 229	19	2.7	374	9	AA703589	AA703589	z14e010.s
c 230	19	2.7	375	9	AA647881	AA647881	ed10e12.s
c 231	19	2.7	375	28	CC448752	CC448752	ZMM8BC033
c 232	19	2.7	379	12	BB731836	BB731836	PS08F03.y
c 233	19	2.7	380	12	BW861940	BW861940	FX4a003.y
c 234	19	2.7	385	13	BO371932	BO371932	CM1-FN004
c 235	19	2.7	386	12	BB736193	BB736193	FX42n12.y
c 236	19	2.7	386	14	D32818	D32818	CELK021H9R
c 237	19	2.7	394	28	AQ684349	AQ684349	HS_5493.B
c 238	19	2.7	395	12	BU117668	BU117668	BU117668
c 239	19	2.7	395	29	DR5M6T	DR5M6T	DR5M6T
c 240	19	2.7	397	9	AL652697	AL652697	wb30f12.x
c 241	19	2.7	397	10	BF062222	BF062222	7K74c03.x
c 242	19	2.7	397	12	BB736153	BB736153	FX42a02.y
c 243	19	2.7	401	14	CK233615	CK233615	rel6906.y
c 244	19	2.7	402	12	BB736087	BB736087	FX49a12.y
c 245	19	2.7	410	9	AA831233	AA831233	oc66f11.s
c 246	19	2.7	411	14	CB178336	CB178336	g1a7c07.y
c 247	19	2.7	413	13	BK554592	BK554592	BK554592
c 248	19	2.7	414	14	CK233362	CK233362	rel2912.y
c 249	19	2.7	415	28	AQ178997	AQ178997	HS_3071.B
c 250	19	2.7	417	13	BO519962	BO519962	NISG_n102
c 251	19	2.7	418	10	BB045154	BB045154	sa43Bc12-
c 252	19	2.7	418	13	BO394801	BO394801	NISG_ng11
c 253	19	2.7	418	14	W23559	W23559	z445f08.r1
c 254	19	2.7	424	14	NA6018	NA6018	yy35a03.r1
c 255	19	2.7	426	13	BY218003	BY218003	BY218003
c 256	19	2.7	428	29	CE443821	CE443821	tl9f-gsa-
c 257	19	2.7	432	10	BF367589	BF367589	IL5-GK003
c 258	19	2.7	432	13	BY690431	BY690431	BY690431
c 259	19	2.7	435	13	BY696245	BY696245	BY696245
c 260	19	2.7	436	12	BB507892	BB507892	BY696245
c 261	19	2.7	441	14	N69666	N69666	sa48Bc09.
c 262	19	2.7	442	28	AQ214088	AQ214088	HS_2187.B
c 263	19	2.7	446	9	AA457598	AA457598	aa80a10.f
c 264	19	2.7	448	29	CE647591	CE647591	tl9f-gsa-
c 265	19	2.7	448	10	AM629817	AM629817	hm11c07.y
c 266	19	2.7	448	12	BU032477	BU032477	BU032477
c 267	19	2.7	448	14	HS2303	HS2303	yy48103.r1
c 268	19	2.7	450	28	AQ700914	AQ700914	HS_2116.A
c 269	19	2.7	454	10	BF428484	BF428484	EE565527
c 270	19	2.7	455	12	BM163004	BM163004	EE565527
c 271	19	2.7	455	29	CC472367	CC472367	CH240.296
c 272	19	2.7	456	14	CB740432	CB740432	AM6ND0CM
c 273	19	2.7	457	14	CF252523	CF252523	hdmn128_c

274	19	2.7	462	28	AZ420625	AZ420625	1M0198304	c	331	19	2.7	544	13	BQ526363	BQ526363	NISC_n015
275	19	2.7	464	10	AM653060	AM653060	103289 MA	c	332	19	2.7	544	28	AZ437376	AZ437376	1M0228B07
c 276	19	2.7	466	14	CA896529	CA896529	B0199601-	c	333	19	2.7	544	28	BH266293	BH266293	CH266293
c 277	19	2.7	468	14	CB094415	CB094415	hzb6903_b	c	334	19	2.7	544	29	CE228921	CE228921	CE228921
c 278	19	2.7	469	12	BI323699	BI323699	kt66d02_y	c	335	19	2.7	547	29	TA229H06P	TA229H06P	TA229H06P
c 279	19	2.7	469	14	CB340513	CB340513	CA23E1021	c	336	19	2.7	548	28	AQ668971	AQ668971	AQ668971
c 280	19	2.7	470	12	BI941803	BI941803	ad16h11_y	c	337	19	2.7	550	9	A1867689	A1867689	h5_3432_A
c 281	19	2.7	471	28	AQ402206	AQ402206	HS_5061_A	c	338	19	2.7	552	13	BX692261	BX692261	BX692261
c 282	19	2.7	476	10	BF198956	BF198956	248833 MA	c	339	19	2.7	554	28	B2520134	B2520134	BOKQ5277E
c 283	19	2.7	476	29	CE814633	CE814633	tiqr-gss-	c	340	19	2.7	555	10	BE551202	BE551202	7b55n11_x
c 284	19	2.7	477	9	AU284006	AU284006	AU284006	c	341	19	2.7	555	12	BM340125	BM340125	ME5T318-C
c 285	19	2.7	478	12	BM689565	BM689565	UI-E-CK1-	c	342	19	2.7	556	14	CF611163	CF611163	LE-C22CF-
c 286	19	2.7	479	13	BQ637507	BQ637507	rft2c03_y	c	343	19	2.7	557	14	CF342383	CF342383	Pfnc1-70
c 287	19	2.7	480	14	D27726	D27726	CE1K003A1R	c	344	19	2.7	558	13	BU495660	BU495660	BU495660
c 288	19	2.7	483	28	AQ134812	AQ134812	HS_3053_A	c	345	19	2.7	560	28	AZ398909	AZ398909	AZ398909
c 289	19	2.7	484	14	CA820036	CA820036	saub3f04_	c	346	19	2.7	563	12	BI105752	BI105752	60M892350
c 290	19	2.7	485	13	BQ391614	BQ391614	NISC_mq19	c	347	19	2.7	563	12	BM341782	BM341782	fm52605_y
c 291	19	2.7	485	14	CD420243	CD420243	r184b01_y	c	348	19	2.7	564	14	CB441727	CB441727	692232 MA
c 292	19	2.7	487	14	CB340092	CB340092	CA23E1021	c	349	19	2.7	564	28	BH063420	BH063420	RPCT-24-2
c 293	19	2.7	489	9	A1477816	A1477816	fb55d08_y	c	350	19	2.7	564	29	BX231608	BX231608	RPCT-24-2
c 294	19	2.7	490	29	DM13M25	DM13M25	Lotus cor	c	351	19	2.7	565	14	CB442066	CB442066	692616 MA
c 295	19	2.7	491	29	AA237448	AA237448	mx28c03_r	c	352	19	2.7	566	12	BP112817	BP112817	BP112817
c 296	19	2.7	494	9	AA238317	AA238317	tiqr-gss-	c	353	19	2.7	567	10	AM274139	AM274139	xv27c07_x
c 297	19	2.7	494	29	CE259868	CE259868	tiqr-gss-	c	354	19	2.7	568	12	BQ620355	BQ620355	602618664
c 298	19	2.7	494	29	CE494949	CE494949	tiqr-gss-	c	355	19	2.7	569	13	BQ837147	BQ837147	r138g12_y
c 299	19	2.7	497	14	CB538086	CB538086	776047 MA	c	356	19	2.7	570	14	CA679810	CA679810	w1m4_pK00
c 300	19	2.7	499	10	AM851044	AM851044	IL3-C022	c	357	19	2.7	573	12	BM271827	BM271827	1935f05_y
c 301	19	2.7	499	10	AM942134	AM942134	LD10457_3	c	358	19	2.7	573	12	BM439663	BM439663	MEET25-H
c 302	19	2.7	500	13	BU786488	BU786488	1n55e01_y	c	359	19	2.7	574	13	BQ519987	BQ519987	NISC_p102
c 303	19	2.7	500	29	CC792499	CC792499	ZMWBBP016	c	360	19	2.7	574	28	AQ122465	AQ122465	HS_3080_A
c 304	19	2.7	502	29	CE773414	CE773414	tiqr-gss-	c	361	19	2.7	577	29	CE616770	CE616770	tiqr-gss-
c 305	19	2.7	504	28	AQ171244	AQ171244	HS_073_B	c	362	19	2.7	578	28	AZ015412	AZ015412	RPCT-23-3
c 306	19	2.7	505	13	BY634475	BY634475	BS54475	c	363	19	2.7	578	28	AQ563332	AQ563332	HS_5334_B
c 307	19	2.7	506	14	CB500570	CB500570	saalga503	c	364	19	2.7	579	10	BF025321	BF025321	d901f05_x
c 308	19	2.7	509	12	BG882533	BG882533	saalmd50	c	365	19	2.7	580	29	CE632886	CE632886	tiqr-gss-
c 309	19	2.7	511	28	AQ470602	AQ470602	CITBI-E1-	c	366	19	2.7	584	29	DR24C25	DR24C25	tiqr-gss-
c 310	19	2.7	511	28	BM151667	BM151667	Danlo rer	c	367	19	2.7	588	12	BI773483	BI773483	Danlo rer
c 311	19	2.7	513	13	BU660295	BU660295	cl58d08_2	c	368	19	2.7	589	13	BU277083	BU277083	603867478
c 312	19	2.7	513	13	BU660295	BU660295	cl58d08_2	c	369	19	2.7	591	14	CB424361	CB424361	598607 MA
c 313	19	2.7	519	29	CE735152	CE735152	tiqr-gss-	c	370	19	2.7	591	28	AQ658225	AQ658225	Shepard D
c 314	19	2.7	523	13	CA042041	CA042041	saalpln5	c	371	19	2.7	591	29	CE281617	CE281617	tiqr-gss-
c 315	19	2.7	524	13	BQ548554	BQ548554	rd33a07_y	c	372	19	2.7	595	28	BH616717	BH616717	BM6AC30H
c 316	19	2.7	524	14	CA455691	CA455691	ACBXCOURT	c	373	19	2.7	596	9	AV864501	AV864501	AV864501
c 317	19	2.7	526	28	BZ543445	BZ543445	OGA_X13TM	c	374	19	2.7	596	13	BQ554426	BQ554426	H4028A11-
c 318	19	2.7	526	29	CE546095	CE546095	tiqr-gss-	c	375	19	2.7	597	9	AV894275	AV894275	AV894275
c 319	19	2.7	527	29	AG240771	AG240771	Lotus cor	c	376	19	2.7	597	28	B2302361	B2302361	KD1792_P1
c 320	19	2.7	527	29	AG240771	AG240771	Lotus cor	c	377	19	2.7	598	29	CE446377	CE446377	tiqr-gss-
c 321	19	2.7	529	29	TA103E08P	TA103E08P	UI-M-BH1-	c	378	19	2.7	599	28	BZ294681	BZ294681	CG1046_r1
c 322	19	2.7	530	29	TA2E10Q	TA2E10Q	T. brucei	c	379	19	2.7	600	14	CA302194	CA302194	tae11d09_
c 323	19	2.7	533	10	BF225590	BF225590	uy43605_x	c	380	19	2.7	601	12	BP514191	BP514191	BP514191
c 324	19	2.7	533	28	BH665528	BH665528	BOMWCB3TF	c	381	19	2.7	602	28	AQ563263	AQ563263	HS_5334_B
c 325	19	2.7	535	10	BG006047	BG006047	PM2-GR001	c	382	19	2.7	603	29	CE776298	CE776298	tiqr-gss-
c 326	19	2.7	535	12	BM166586	BM166586	EST569109	c	383	19	2.7	604	28	BH782530	BH782530	fmb011f0
c 327	19	2.7	536	14	CP562341	CP562341	B0446010-	c	384	19	2.7	606	13	BQ393720	BQ393720	NISC-ng05
c 328	19	2.7	538	12	BQ089342	BQ089342	BU089342	c	385	19	2.7	610	29	CE304344	CE304344	tiqr-gss-
c 329	19	2.7	541	28	AQ202671	AQ202671	RPCT11-58	c	386	19	2.7	611	28	AZ314835	AZ314835	1M0031N13
c 330	19	2.7	541	28	AQ202671	AQ202671	RPCT11-58	c	387	19	2.7	612	12	BJ359400	BJ359400	BJ359400



c 388	19	2.7	617	14	CB350642	c 445	19	2.7	689	28	CC079287
c 389	19	2.7	617	28	AQ736017	c 446	19	2.7	689	29	BX124857
c 390	19	2.7	619	12	BM349128	c 447	19	2.7	691	29	CE476214
c 391	19	2.7	619	28	AQ440977	c 448	19	2.7	696	14	CD237746
c 392	19	2.7	620	29	DR1B55	c 449	19	2.7	697	14	CB550058
c 393	19	2.7	621	29	CE422296	c 450	19	2.7	697	29	CE425276
c 394	19	2.7	622	14	CA941124	c 451	19	2.7	699	29	CC729516
c 395	19	2.7	622	13	BU548346	c 452	19	2.7	699	29	CC729516
c 396	19	2.7	629	13	BM282172	c 453	19	2.7	700	28	BH999538
c 397	19	2.7	631	9	AI991575	c 454	19	2.7	702	29	CE150919
c 398	19	2.7	632	28	A2665806	c 455	19	2.7	705	13	BM005593
c 399	19	2.7	634	29	CE256127	c 456	19	2.7	706	13	BU278424
c 400	19	2.7	635	9	AU220273	c 457	19	2.7	706	29	CE630215
c 401	19	2.7	635	10	BF055342	c 458	19	2.7	707	13	BY751241
c 402	19	2.7	636	14	CB506048	c 459	19	2.7	708	13	BM034467
c 403	19	2.7	637	10	BF294221	c 460	19	2.7	708	28	AQ266709
c 404	19	2.7	637	10	BF295668	c 461	19	2.7	714	12	BP178228
c 405	19	2.7	638	29	DR49C15T	c 462	19	2.7	715	26	BZ602244
c 406	19	2.7	639	28	AQ485713	c 463	19	2.7	716	29	CE775183
c 407	19	2.7	640	13	BO625557	c 464	19	2.7	718	10	BF270756
c 408	19	2.7	642	29	CE734819	c 465	19	2.7	718	28	AZ986420
c 409	19	2.7	645	12	BJ346819	c 466	19	2.7	721	28	AZ945675
c 410	19	2.7	645	29	CB144106	c 467	19	2.7	724	29	CE726051
c 411	19	2.7	646	10	BB629495	c 468	19	2.7	725	28	CC439369
c 412	19	2.7	646	13	BM107597	c 469	19	2.7	726	29	BM243038
c 413	19	2.7	647	29	CB838433	c 470	19	2.7	727	13	BM164058
c 414	19	2.7	648	13	BM108762	c 471	19	2.7	736	29	AG000634
c 415	19	2.7	649	9	AL853656	c 472	19	2.7	740	13	BU333334
c 416	19	2.7	649	9	AV975733	c 473	19	2.7	740	29	BX150410
c 417	19	2.7	649	13	BM293505	c 474	19	2.7	741	29	CE353251
c 418	19	2.7	651	9	AV700676	c 475	19	2.7	744	14	CD100787
c 419	19	2.7	651	28	A2521527	c 476	19	2.7	750	29	BX221241
c 420	19	2.7	653	29	AG117369	c 477	19	2.7	756	29	CG989326
c 421	19	2.7	657	28	BH004778	c 478	19	2.7	757	13	BY769681
c 422	19	2.7	660	29	CE149202	c 479	19	2.7	758	14	CD104681
c 423	19	2.7	661	29	CE783973	c 480	19	2.7	758	14	CD454571
c 424	19	2.7	662	12	BP020628	c 481	19	2.7	760	14	CA372372
c 425	19	2.7	662	13	BY723108	c 482	19	2.7	760	14	CA372372
c 426	19	2.7	662	28	BH003097	c 483	19	2.7	761	29	CG230325
c 427	19	2.7	663	13	BU332377	c 484	19	2.7	764	29	CE272943
c 428	19	2.7	664	9	AL881289	c 485	19	2.7	769	28	CC337156
c 429	19	2.7	666	12	BP025084	c 486	19	2.7	769	29	CC337156
c 430	19	2.7	666	28	A2947047	c 487	19	2.7	771	14	CB148193
c 431	19	2.7	666	29	AG177682	c 488	19	2.7	771	28	CB958319
c 432	19	2.7	668	14	CB889620	c 489	19	2.7	772	29	BZ392380
c 433	19	2.7	668	29	CE621964	c 490	19	2.7	772	29	BX174232
c 434	19	2.7	670	9	AI652883	c 491	19	2.7	773	29	CG956685
c 435	19	2.7	673	28	BZ044209	c 492	19	2.7	774	14	CD854177
c 436	19	2.7	675	28	CC066013	c 493	19	2.7	774	14	CD889997
c 437	19	2.7	679	12	BM170134	c 494	19	2.7	775	29	CNS0612C
c 438	19	2.7	679	28	BM115952	c 495	19	2.7	776	14	CB316981
c 439	19	2.7	680	28	BZ021013	c 496	19	2.7	776	28	BZ228418
c 440	19	2.7	680	29	CC026885	c 497	19	2.7	777	14	CK095796
c 441	19	2.7	682	12	BJ044940	c 498	19	2.7	778	28	CC313785
c 442	19	2.7	682	13	BX103776	c 499	19	2.7	781	29	CG934012
c 443	19	2.7	684	28	BH712973	c 500	19	2.7	783	29	BX195877
c 444	19	2.7	684	29	CB836784	c 501	19	2.7	783	29	BX208600
									785	28	AZ183662

CC079287	CSU-K33r.
BX124857	Danilo rer
CE476214	tiqr-gss-
CD237746	FNRPAP04
CB550058	MPEL0001-
CE425276	tiqr-gss-
CC729516	OGJWMB17H
BH999538	oe996h08.
CE150919	tiqr-gss-
BM005593	BM055593
BU278424	603862766
CE630215	tiqr-gss-
BY751241	BY751241
AZ9937008	2M0195106
BM034467	BM034467
AO266709	BP0C111-75
BP178228	BP178228
BZ602244	WHABK05TR
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BF270756	GA_EB000
AZ986420	2M0268D08
AZ945675	2M0207G11
CE726051	tiqr-gss-
CC439369	P0HP427B
BX243038	Danilo rer
BM164058	BM164058
AG000634	Homo sap1
BU333334	603497895
BX150410	Danilo rer
CE353251	tiqr-gss-
CD100787	AGNOCOURT
BX221241	Danilo rer
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BY769681	BM769681
CD104681	AGNOCOURT
CD454571	Mengen111
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CG230325	OGGBX59TH
CE272943	tiqr-gss-
CC337156	OGSACB8TV
CB148193	Danilo rer
CB958319	AGNOCOURT
BZ392380	EINBU21TR
BX174232	Danilo rer
CG956685	M8EE61TR
CD854177	DH0AMM272
CD889997	G118_113J
CNS0612C	t7 end of
CB316981	AGNOCOURT
BZ228418	CH230-352
CK095796	UABDPH09
CC313785	TAM32-411
CG934012	M8EDD16TF
BX195877	Danilo rer
BX208600	Danilo rer
AZ183662	SP_1001_A

c 502	19	2.7	788	29	AG117202	Pen troc1	c 559	19	2.7	893	28	BH162930	BH162930
c 503	19	2.7	793	13	BX712643	BX712643	c 560	19	2.7	894	28	B2189413	B2189413
c 504	19	2.7	793	28	B2967958	B2967958	c 561	19	2.7	895	10	BF701802	BF701802
c 505	19	2.7	796	28	BH452975	BH452975	c 562	19	2.7	897	28	A2541767	A2541767
c 506	19	2.7	797	28	BH280987	BH280987	c 563	19	2.7	898	10	BF781504	BF781504
c 507	19	2.7	801	29	CL003464	CL003464	c 564	19	2.7	898	28	A2536300	A2536300
c 508	19	2.7	804	29	CC539978	CC539978	c 565	19	2.7	899	28	A2535398	A2535398
c 509	19	2.7	805	29	CNS07CN	CNS07CN	c 566	19	2.7	900	13	BX347911	BX347911
c 510	19	2.7	807	29	CC283053	CC283053	c 567	19	2.7	900	29	CC283053	CC283053
c 511	19	2.7	809	28	B2172373	B2172373	c 568	19	2.7	902	13	BX327950	BX327950
c 512	19	2.7	809	29	CC637088	CC637088	c 569	19	2.7	902	13	BX327950	BX327950
c 513	19	2.7	812	14	CD248121	CD248121	c 570	19	2.7	903	28	BH146542	BH146542
c 514	19	2.7	817	28	BH688324	BH688324	c 571	19	2.7	904	28	BH146542	BH146542
c 515	19	2.7	824	13	BU234266	BU234266	c 572	19	2.7	904	28	A2548896	A2548896
c 516	19	2.7	825	14	CF783233	CF783233	c 573	19	2.7	904	28	BH158848	BH158848
c 517	19	2.7	825	29	CC960768	CC960768	c 574	19	2.7	904	28	CC543155	CC543155
c 518	19	2.7	825	29	CNS02VTV	CNS02VTV	c 575	19	2.7	905	28	A2680096	A2680096
c 519	19	2.7	826	29	CC497738	CC497738	c 576	19	2.7	905	28	A2680096	A2680096
c 520	19	2.7	830	29	CC224109	CC224109	c 577	19	2.7	905	28	A2680096	A2680096
c 521	19	2.7	833	12	BG614457	BG614457	c 578	19	2.7	905	28	BH161020	BH161020
c 522	19	2.7	833	13	BUS99915	BUS99915	c 579	19	2.7	910	28	A2534544	A2534544
c 523	19	2.7	835	29	CC308499	CC308499	c 580	19	2.7	911	29	CC947182	CC947182
c 524	19	2.7	836	28	B2967960	B2967960	c 581	19	2.7	912	29	CC850900	CC850900
c 525	19	2.7	837	28	A2545464	A2545464	c 582	19	2.7	915	29	CC850900	CC850900
c 526	19	2.7	841	28	B2389758	B2389758	c 583	19	2.7	919	28	BH155121	BH155121
c 527	19	2.7	843	28	BH329541	BH329541	c 584	19	2.7	919	28	CC262858	CC262858
c 528	19	2.7	844	13	BUS61414	BUS61414	c 585	19	2.7	922	29	CC058285	CC058285
c 529	19	2.7	844	29	BK197708	BK197708	c 586	19	2.7	924	28	B2461056	B2461056
c 530	19	2.7	846	10	BF099935	BF099935	c 587	19	2.7	928	28	BH131549	BH131549
c 531	19	2.7	847	28	B2172013	B2172013	c 588	19	2.7	929	29	CC948428	CC948428
c 532	19	2.7	849	14	CP653176	CP653176	c 589	19	2.7	934	28	B2817964	B2817964
c 533	19	2.7	849	28	B2223908	B2223908	c 590	19	2.7	941	28	B2401222	B2401222
c 534	19	2.7	851	28	BH478351	BH478351	c 591	19	2.7	941	29	CC261453	CC261453
c 535	19	2.7	852	28	A2747606	A2747606	c 592	19	2.7	945	29	CNS01054	CNS01054
c 536	19	2.7	853	28	A2681952	A2681952	c 593	19	2.7	947	28	BH134574	BH134574
c 537	19	2.7	854	28	B2395298	B2395298	c 594	19	2.7	949	28	B2817968	B2817968
c 538	19	2.7	855	28	A2684744	A2684744	c 595	19	2.7	956	10	BF783073	BF783073
c 539	19	2.7	857	28	BH138970	BH138970	c 596	19	2.7	967	28	CC283065	CC283065
c 540	19	2.7	858	28	A2190348	A2190348	c 597	19	2.7	986	12	B1868921	B1868921
c 541	19	2.7	860	13	BK699033	BK699033	c 598	19	2.7	988	28	CC274721	CC274721
c 542	19	2.7	861	12	BG615614	BG615614	c 599	19	2.7	992	29	CNS060CT	CNS060CT
c 543	19	2.7	864	12	BG741231	BG741231	c 600	19	2.7	1006	28	CC190264	CC190264
c 544	19	2.7	866	13	BUS60984	BUS60984	c 601	19	2.7	1014	28	A2935665	A2935665
c 545	19	2.7	867	29	CC698239	CC698239	c 602	19	2.7	1035	28	CC213932	CC213932
c 546	19	2.7	867	29	CC946868	CC946868	c 603	19	2.7	1041	29	CC209722	CC209722
c 547	19	2.7	868	28	BH162606	BH162606	c 604	19	2.7	1045	28	CC209722	CC209722
c 548	19	2.7	870	28	B2155101	B2155101	c 605	19	2.7	1087	12	BG494028	BG494028
c 549	19	2.7	871	29	CC262867	CC262867	c 606	19	2.7	1090	29	CC432105	CC432105
c 550	19	2.7	872	29	CC9556113	CC9556113	c 607	19	2.7	1101	29	CNS0021X	CNS0021X
c 551	19	2.7	873	29	CG141255	CG141255	c 608	19	2.7	1101	29	CNS0021X	CNS0021X
c 552	19	2.7	876	14	CF548426	CF548426	c 609	19	2.7	1101	29	CNS0031F	CNS0031F
c 553	19	2.7	878	14	CF935846	CF935846	c 610	19	2.7	1109	28	CC275353	CC275353
c 554	19	2.7	886	10	BF682967	BF682967	c 611	19	2.7	1127	28	CC281206	CC281206
c 555	19	2.7	888	28	BH154884	BH154884	c 612	19	2.7	1151	13	BUS08171	BUS08171
c 556	19	2.7	889	28	B2089038	B2089038	c 613	19	2.7	1156	28	CC303531	CC303531
c 557	19	2.7	890	13	BU309912	BU309912	c 614	19	2.7	1164	14	CC209747	CC209747
c 558	19	2.7					c 615	19	2.7				

616	19	2.7	1201	9	AI560964	AI560964	672	18	2.5	183	14	CF381807	CF381807
617	19	2.7	1201	9	AI563531	AI563531	673	18	2.5	184	14	CF426422	CF426422
618	19	2.7	1219	10	BE781637	BE781637	674	18	2.5	185	14	CF383391	CF383391
619	19	2.7	1404	28	BE557894	BE557894	675	18	2.5	186	12	EM055280	EM055280
620	19	2.7	1544	29	AY413870	AY413870	676	18	2.5	187	29	CE207306	CE207306
621	19	2.7	1650	29	AY413868	AY413868	677	18	2.5	187	13	BU743121	BU743121
622	19	2.7	4963	11	BC030789	BC030789	678	18	2.5	187	14	CF382821	CF382821
623	18	2.5	40	28	BH788828	BH788828	679	18	2.5	188	9	AI376105	AI376105
624	18	2.5	43	9	AW059808	AW059808	680	18	2.5	191	14	CF424659	CF424659
625	18	2.5	46	14	D25636	D25636	681	18	2.5	191	14	CF927071	CF927071
626	18	2.5	72	28	BE763918	BE763918	682	18	2.5	194	14	CB446279	CB446279
627	18	2.5	111	9	AA421204	AA421204	683	18	2.5	194	14	CF383798	CF383798
628	18	2.5	113	9	AU009118	AU009118	684	18	2.5	194	29	CG311245	CG311245
629	18	2.5	121	9	AI352692	AI352692	685	18	2.5	195	10	BB324211	BB324211
630	18	2.5	125	9	AA923680	AA923680	686	18	2.5	195	12	BI647150	BI647150
631	18	2.5	126	9	AU284784	AU284784	687	18	2.5	195	13	BY662126	BY662126
632	18	2.5	139	9	AI810691	AI810691	688	18	2.5	195	14	CB445920	CB445920
633	18	2.5	142	28	BH168951	BH168951	689	18	2.5	195	14	CF379492	CF379492
634	18	2.5	149	9	AU269464	AU269464	690	18	2.5	197	9	AI340977	AI340977
635	18	2.5	149	10	BB067692	BB067692	691	18	2.5	197	9	AV367121	AV367121
636	18	2.5	152	13	BY649109	BY649109	692	18	2.5	197	14	CB893802	CB893802
637	18	2.5	154	10	BE143146	BE143146	693	18	2.5	197	14	BB424668	BB424668
638	18	2.5	154	13	BU850827	BU850827	694	18	2.5	198	28	BH296687	BH296687
639	18	2.5	154	14	CF423792	CF423792	695	18	2.5	198	28	BH176652	BH176652
640	18	2.5	155	10	BB056958	BB056958	696	18	2.5	199	10	BB429019	BB429019
641	18	2.5	156	9	AV338254	AV338254	697	18	2.5	199	10	BB510631	BB510631
642	18	2.5	157	9	AV173236	AV173236	698	18	2.5	199	10	BE992643	BE992643
643	18	2.5	157	29	OC718274	OC718274	699	18	2.5	199	12	EM792733	EM792733
644	18	2.5	158	10	BB535931	BB535931	700	18	2.5	200	9	AV233498	AV233498
645	18	2.5	159	10	BB788415	BB788415	701	18	2.5	200	10	BB427162	BB427162
646	18	2.5	159	14	CD537088	CD537088	702	18	2.5	200	10	BB430543	BB430543
647	18	2.5	160	9	AI768714	AI768714	703	18	2.5	200	10	BB453893	BB453893
648	18	2.5	160	10	AA326756	AA326756	704	18	2.5	200	10	CD645165	CD645165
649	18	2.5	161	29	CE763829	CE763829	705	18	2.5	200	14	BB723957	BB723957
650	18	2.5	162	14	CF621859	CF621859	706	18	2.5	201	14	CD645383	CD645383
651	18	2.5	163	14	CF259840	CF259840	707	18	2.5	201	10	BB049797	BB049797
652	18	2.5	165	10	BB062122	BB062122	708	18	2.5	201	10	BB0848457	BB0848457
653	18	2.5	165	28	AZ720377	AZ720377	709	18	2.5	201	10	BB427446	BB427446
654	18	2.5	166	14	CF382320	CF382320	710	18	2.5	201	14	CA337195	CA337195
655	18	2.5	167	14	CF382669	CF382669	711	18	2.5	202	9	AV330922	AV330922
656	18	2.5	169	9	AV247469	AV247469	712	18	2.5	202	10	BB428196	BB428196
657	18	2.5	170	9	AV150999	AV150999	713	18	2.5	202	29	CE028831	CE028831
658	18	2.5	170	13	BU947176	BU947176	714	18	2.5	203	9	AI450819	AI450819
659	18	2.5	172	14	CB105024	CB105024	715	18	2.5	203	9	AV336084	AV336084
660	18	2.5	172	14	CF423578	CF423578	716	18	2.5	203	10	BB030572	BB030572
661	18	2.5	172	14	CF423578	CF423578	717	18	2.5	203	10	BB057089	BB057089
662	18	2.5	173	9	AV314003	AV314003	718	18	2.5	203	10	BB057990	BB057990
663	18	2.5	173	14	CF926285	CF926285	719	18	2.5	203	10	BB059233	BB059233
664	18	2.5	174	14	CF804353	CF804353	720	18	2.5	203	10	BB303117	BB303117
665	18	2.5	177	14	CF804722	CF804722	721	18	2.5	203	10	BB306194	BB306194
666	18	2.5	178	14	CF381830	CF381830	722	18	2.5	203	10	BB434998	BB434998
667	18	2.5	179	14	CF353594	CF353594	723	18	2.5	203	10	BB441998	BB441998
668	18	2.5	180	28	B48430	B48430	724	18	2.5	204	10	BB150848	BB150848
669	18	2.5	182	29	CE654869	CE654869	725	18	2.5	205	9	AV340717	AV340717
670	18	2.5	183	9	AV381989	AV381989	726	18	2.5	205	9	AV379331	AV379331
671	18	2.5	183	12	BB930437	BB930437	727	18	2.5	205	10	BB022579	BB022579
							728	18	2.5	205	10	BB022579	BB022579

729	c	730	18	2.5	205	10	BB388073	BB388073	c	786	18	2.5	249	9	AV366712	AV366712
730	c	731	18	2.5	205	29	CE050396	CE050396	c	787	18	2.5	249	9	AV020412	AV020412
731	c	732	18	2.5	205	29	CE803774	CE803774	c	788	18	2.5	250	9	AV342057	AV342057
732	c	733	18	2.5	206	10	BB049692	BB049692	c	789	18	2.5	251	9	AV1972335	AV1972335
733	c	734	18	2.5	206	10	BB049895	BB049895	c	790	18	2.5	252	10	BF007935	BF007935
734	c	735	18	2.5	206	10	BB074437	BB074437	c	791	18	2.5	253	14	F04912	F04912
735	c	736	18	2.5	206	10	BB383079	BB383079	c	792	18	2.5	254	13	BQ161436	BQ161436
736	c	737	18	2.5	206	10	BB431366	BB431366	c	793	18	2.5	255	9	AV370086	AV370086
737	c	738	18	2.5	206	14	CB894154	CB894154	c	794	18	2.5	255	14	CF425741	CF425741
738	c	739	18	2.5	207	10	BB389399	BB389399	c	795	18	2.5	257	10	BB349946	BB349946
739	c	740	18	2.5	208	10	BB422058	BB422058	c	796	18	2.5	260	9	AV026126	AV026126
740	c	741	18	2.5	209	10	BB545679	BB545679	c	797	18	2.5	260	9	AV221882	AV221882
741	c	742	18	2.5	211	10	AA066257	AA066257	c	798	18	2.5	260	12	BQ440161	BQ440161
742	c	743	18	2.5	213	13	BB725399	BB725399	c	799	18	2.5	261	9	AA874525	AA874525
743	c	744	18	2.5	214	14	T29811	T29811	c	800	18	2.5	261	9	A1509496	A1509496
744	c	745	18	2.5	214	28	AQ274991	AQ274991	c	801	18	2.5	263	12	B1493258	B1493258
745	c	746	18	2.5	215	10	BF033650	BF033650	c	802	18	2.5	265	9	AV330479	AV330479
746	c	747	18	2.5	216	12	B1745308	B1745308	c	803	18	2.5	265	9	AV334019	AV334019
747	c	748	18	2.5	218	9	AV204192	AV204192	c	804	18	2.5	265	9	AM089114	AM089114
748	c	749	18	2.5	219	10	AM151417	AM151417	c	805	18	2.5	265	14	W51650	W51650
749	c	750	18	2.5	221	13	BO567299	BO567299	c	806	18	2.5	266	10	BB672376	BB672376
750	c	751	18	2.5	222	14	N75587	N75587	c	807	18	2.5	266	10	BFI19344	BFI19344
751	c	752	18	2.5	222	14	N75587	N75587	c	808	18	2.5	266	12	B1868626	B1868626
752	c	753	18	2.5	223	9	AV369214	AV369214	c	809	18	2.5	267	10	BB419364	BB419364
753	c	754	18	2.5	224	14	CF614615	CF614615	c	810	18	2.5	267	12	B1676747	B1676747
754	c	755	18	2.5	228	9	AV365319	AV365319	c	811	18	2.5	267	12	B1676780	B1676780
755	c	756	18	2.5	229	9	AV355584	AV355584	c	812	18	2.5	268	9	AV308652	AV308652
756	c	757	18	2.5	231	9	A1639784	A1639784	c	813	18	2.5	268	13	BX564024	BX564024
757	c	758	18	2.5	232	10	AV323224	AV323224	c	814	18	2.5	269	10	BB466740	BB466740
758	c	759	18	2.5	232	10	BE113851	BE113851	c	815	18	2.5	269	12	BM661731	BM661731
759	c	760	18	2.5	233	9	A1550304	A1550304	c	816	18	2.5	270	14	H31955	H31955
760	c	761	18	2.5	234	29	CE691188	CE691188	c	817	18	2.5	271	9	AV330320	AV330320
761	c	762	18	2.5	237	9	AV338744	AV338744	c	818	18	2.5	272	12	BJ223534	BJ223534
762	c	763	18	2.5	237	10	BB368359	BB368359	c	819	18	2.5	272	28	CC167590	CC167590
763	c	764	18	2.5	237	10	BB538788	BB538788	c	820	18	2.5	273	9	AV028985	AV028985
764	c	765	18	2.5	237	10	BB541259	BB541259	c	821	18	2.5	273	9	AV220414	AV220414
765	c	766	18	2.5	239	14	CF355807	CF355807	c	822	18	2.5	273	9	AV265537	AV265537
766	c	767	18	2.5	239	14	CF42356	CF42356	c	823	18	2.5	274	9	AM541463	AM541463
767	c	768	18	2.5	239	14	CF42356	CF42356	c	824	18	2.5	274	10	BB382706	BB382706
768	c	769	18	2.5	240	12	B1054051	B1054051	c	825	18	2.5	274	10	BB768360	BB768360
769	c	770	18	2.5	240	14	CF754749	CF754749	c	826	18	2.5	274	12	BM438991	BM438991
770	c	771	18	2.5	240	28	B2580946	B2580946	c	827	18	2.5	275	9	AA959879	AA959879
771	c	772	18	2.5	240	29	CG787798	CG787798	c	828	18	2.5	276	10	BB694958	BB694958
772	c	773	18	2.5	242	10	AM206803	AM206803	c	829	18	2.5	276	28	BH076100	BH076100
773	c	774	18	2.5	243	9	AV349867	AV349867	c	830	18	2.5	277	10	BB387115	BB387115
774	c	775	18	2.5	243	10	AV371780	AV371780	c	831	18	2.5	279	9	AV278240	AV278240
775	c	776	18	2.5	243	10	AM324330	AM324330	c	832	18	2.5	279	9	AV325490	AV325490
776	c	777	18	2.5	244	14	CF388656	CF388656	c	833	18	2.5	280	14	RO5387	RO5387
777	c	778	18	2.5	245	9	AV233352	AV233352	c	834	18	2.5	280	9	AV227278	AV227278
778	c	779	18	2.5	245	9	AV372420	AV372420	c	835	18	2.5	281	9	AV222042	AV222042
779	c	780	18	2.5	246	9	A1453328	A1453328	c	836	18	2.5	281	10	BB443305	BB443305
780	c	781	18	2.5	246	10	BB859660	BB859660	c	837	18	2.5	282	12	BM115793	BM115793
781	c	782	18	2.5	246	12	BB993446	BB993446	c	838	18	2.5	282	12	B1847639	B1847639
782	c	783	18	2.5	246	28	B2387805	B2387805	c	839	18	2.5	283	12	B1934450	B1934450
783	c	784	18	2.5	247	9	AV282154	AV282154	c	840	18	2.5	283	9	AA597632	AA597632
784	c	785	18	2.5	247	28	B2356646	B2356646	c	841	18	2.5	284	10	BB987778	BB987778
785	c		18	2.5	247	28	B2356646	B2356646	c	842	18	2.5	284	9	AV325600	AV325600

c 843	18	2.5	284	10	AV438945	AV438945	x106d12.x	900	18	2.5	306	14	CA636303	CA636303	w1e1n.pk0
844	18	2.5	284	10	AW619812	AW619812	7880 MARC	901	18	2.5	307	12	B1079009	B1079009	602872270
845	18	2.5	284	12	B1079410	B1079410	602873806	902	18	2.5	307	14	H88302	H88302	y118f10..r1
c 846	18	2.5	284	14	W91688	W91688	MTR.F09..077	903	18	2.5	309	9	A180532	A180532	t14d4e12.x
847	18	2.5	285	10	BB074884	BB074884	BB074884	904	18	2.5	310	10	BB336524	BB336524	BB336524
848	18	2.5	285	10	BB383494	BB383494	BB383494	905	18	2.5	310	10	BB453350	BB453350	BB453350
c 849	18	2.5	285	10	BF222217	BF222217	7p4d01.x	906	18	2.5	311	9	AV104630	AV104630	AV104630
c 850	18	2.5	285	12	BS977377	BS977377	CM4-C1003	907	18	2.5	311	12	BG307784	BG307784	fms2910..y
c 851	18	2.5	286	14	F02262	F02262	HSCOUN102.n	908	18	2.5	312	9	A1831607	A1831607	w139f11..x
852	18	2.5	287	9	AV338359	AV338359	AV338359	909	18	2.5	312	9	AV220410	AV220410	AV220410
c 853	18	2.5	287	10	BB511457	BB511457	BB511457	910	18	2.5	313	9	AA287103	AA287103	z838f08.s
c 854	18	2.5	287	10	BB693629	BB693629	BB693629	911	18	2.5	313	28	BH644139	BH644139	BH644139
855	18	2.5	288	10	BB074833	BB074833	BB074833	912	18	2.5	314	9	AV220418	AV220418	AV220418
856	18	2.5	289	10	BB307613	BB307613	BB307613	913	18	2.5	314	12	BG994798	BG994798	PMO-HR091
857	18	2.5	290	10	BF451211	BF451211	uz66e07.x	914	18	2.5	314	13	BK266258	BK266258	BK266258
c 858	18	2.5	290	10	BB081909	BB081909	BB081909	915	18	2.5	314	13	BK275843	BK275843	BK275843
859	18	2.5	290	10	BB429405	BB429405	BB429405	916	18	2.5	314	14	CB053383	CB053383	N1EC.g114
860	18	2.5	290	10	BB429557	BB429557	BB429557	917	18	2.5	315	10	BB547483	BB547483	BB547483
861	18	2.5	290	12	BM748950	BM748950	K-E5T0023	918	18	2.5	315	14	CK276031	CK276031	CK276031
c 862	18	2.5	290	14	H88303	H88303	y118f10..s1	919	18	2.5	315	14	CK276031	CK276031	ESY722109
c 863	18	2.5	291	9	AA917591	AA917591	o180f06.s	920	18	2.5	316	28	CC138332	CC138332	h25d08..b
864	18	2.5	291	9	AV119582	AV119582	AV119582	921	18	2.5	316	28	CC138332	CC138332	NDL.12G6..
865	18	2.5	291	9	AV338683	AV338683	AV338683	922	18	2.5	317	28	AA0918893	AA0918893	RPC1-23..2
c 866	18	2.5	291	10	BB119227	BB119227	BB119227	923	18	2.5	318	10	BB392958	BB392958	BB392958
c 867	18	2.5	291	10	BB181345	BB181345	BB181345	924	18	2.5	318	12	BO435241	BO435241	BO435241
c 868	18	2.5	293	10	BB130417	BB130417	BB130417	925	18	2.5	318	28	BH101972	BH101972	RPCT-24..3
c 869	18	2.5	293	10	BB180870	BB180870	BB180870	926	18	2.5	319	10	BE993025	BE993025	BE993025
870	18	2.5	294	10	BB488570	BB488570	BB488570	927	18	2.5	320	9	AV348729	AV348729	AV348729
871	18	2.5	294	14	CD409035	CD409035	GM.CK3582	928	18	2.5	321	10	BB378811	BB378811	BB378811
c 872	18	2.5	296	10	AW129326	AW129326	w159g07..x	929	18	2.5	321	10	BE368872	BE368872	601221506
c 873	18	2.5	296	10	AW134864	AW134864	UT-H-B11..	930	18	2.5	322	9	AU224690	AU224690	AU224690
c 874	18	2.5	296	28	AA474209	AA474209	IM0290N01	931	18	2.5	323	10	BB390958	BB390958	BB390958
c 875	18	2.5	297	9	AV325944	AV325944	AV325944	932	18	2.5	324	12	BI019153	BI019153	BI019153
c 876	18	2.5	297	10	BB063188	BB063188	BB063188	933	18	2.5	324	13	BY687833	BY687833	BY687833
c 877	18	2.5	298	9	A161832	A161832	w55Bb05..x	934	18	2.5	324	14	N22723	N22723	y64d03..s1
878	18	2.5	298	10	BB023785	BB023785	BB023785	935	18	2.5	325	10	BB453222	BB453222	BB453222
c 879	18	2.5	299	10	BB181442	BB181442	BB181442	936	18	2.5	325	10	BB521151	BB521151	BB521151
880	18	2.5	299	10	BB387397	BB387397	BB387397	937	18	2.5	326	10	BB376333	BB376333	BB376333
881	18	2.5	300	10	BB027769	BB027769	BB027769	938	18	2.5	326	12	BG940166	BG940166	BG940166
882	18	2.5	300	10	BB417605	BB417605	BB417605	939	18	2.5	326	13	CG300918	CG300918	CG300918
883	18	2.5	300	10	BB487228	BB487228	BB487228	940	18	2.5	326	29	CG300918	CG300918	CG300918
c 884	18	2.5	300	28	BH195169	BH195169	TC3-71H3..	941	18	2.5	327	14	CD068932	CD068932	MA2-0006U
c 885	18	2.5	301	9	A1721238	A1721238	as6e411..x	942	18	2.5	328	10	BE651751	BE651751	BE651751
886	18	2.5	301	10	BB393770	BB393770	BB393770	943	18	2.5	329	10	BB141985	BB141985	BB141985
c 887	18	2.5	301	14	CB844144	CB844144	RF02.1371	944	18	2.5	330	10	BB724754	BB724754	BB724754
888	18	2.5	302	10	BB381699	BB381699	BB381699	945	18	2.5	330	14	H65036	H65036	h65036
889	18	2.5	302	13	C21343	C21343	HUMGS00366	946	18	2.5	330	28	AZ233850	AZ233850	RPCT-23..9
890	18	2.5	303	9	AV327724	AV327724	AV327724	947	18	2.5	331	10	BF580707	BF580707	BF580707
891	18	2.5	304	9	AV220356	AV220356	AV220356	948	18	2.5	332	9	AA669062	AA669062	ab92f07..s
c 892	18	2.5	304	10	BF755841	BF755841	CM3-C1057	949	18	2.5	332	9	A1365511	A1365511	qx95g06..x
c 893	18	2.5	304	10	AW148360	AW148360	x1f13e12..x	950	18	2.5	332	9	AU000976	AU000976	AU000976
894	18	2.5	305	9	AV368441	AV368441	AV368441	951	18	2.5	332	9	AV139836	AV139836	AV139836
895	18	2.5	305	12	BG940165	BG940165	ax04a02..f	952	18	2.5	332	10	BB461929	BB461929	BB461929
c 896	18	2.5	306	10	BB831839	BB831839	RC4-C0R007	953	18	2.5	332	10	BE424234	BE424234	WHE0077..H
897	18	2.5	306	12	BS218027	BS218027	RS138777	954	18	2.5	333	10	BF007460	BF007460	1472185.A
c 898	18	2.5	306	12	BS122978	BS122978	603175494	955	18	2.5	333	14	W38972	W38972	z258d10..r1
c 899	18	2.5	306	12	BI694034	BI694034	603342220	956	18	2.5	335	9	AA723509	AA723509	zg71h09..s

Accession	Version	Keywords	Result 1	LOCUS	DEFINITION	ACCESSION	VERSION	KEYWORDS
BE115451	1	GI:8507556	407 bp	mRNA	linear	EST 13-JUN-2000		
UI-R-BSI-amw-a-04-0-UI	1				UI-R-BSI Ratius norvegicus cDNA clone			
BE115451	1							
BE115451	1							

# ALIGNMENTS

Accession	Version	Keywords	Result 1	LOCUS	DEFINITION	ACCESSION	VERSION	KEYWORDS
BE115451	1	GI:8507556	407 bp	mRNA	linear	EST 13-JUN-2000		
UI-R-BSI-amw-a-04-0-UI	1				UI-R-BSI Ratius norvegicus cDNA clone			
BE115451	1							
BE115451	1							

Source	Organism	Reference	Authors	Title	Journal	Medline	PubMed	Comment
Rattus norvegicus (Norway rat)	Rattus norvegicus	1 (bases 1 to 407)	Bonaldi, M.F., Lennon, G. and Soares, M.B.	Normalization and subtraction: two approaches to facilitate gene discovery	Genome Res. 6 (9), 791-806 (1996)	97044477	8889548	Contact: Soares, MB Coordinated Laboratory for Computational Genomics University of Iowa 375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA Tel: 319 335 8250 Fax: 319 335 9565 Email: benton-soares@uiowa.edu The sequence contained an oligo-dT track that was present in the oligonucleotide that was used to prime the synthesis of first strand cDNA and therefore this may represent a bonafide poly A tail. The sequence tag present in the cDNA between the NotI site and the oligo-dT track served to verify it as a clone from the normalized embryo at 13 dpc library cDNA Library Preparation: M.B. Soares Lab Clone distribution: clones will be available through Research Genetics (www.resgen.com) Seq primer: M13 Forward POLYA=Yes.

# ORIGIN

Query Match 3.2%; Score 23; DB 10; Length 407;  
Best Local Similarity 100.0%; Pred. No. 11;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 2  
 A2263506/c 420 bp DNA linear GSS 26-JUL-2000  
 LOCUS  
 DEFINITION  
 RPCI-23-115K4.TV RPCI-23 Mus musculus genomic clone RPCI-23-115K4,  
 genomic survey sequence.  
 ACCESSION  
 A2263506  
 VERSION  
 A2263506.1 GI:9473833  
 KEYWORDS  
 GSS.  
 SOURCE  
 Mus musculus (house mouse)  
 ORGANISM  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
 REFERENCE  
 1 (bases 1 to 420)  
 Zhao,S., Nierman,W., Feldblum,T., Malek,J., Shatman,S.,  
 Akincic,B., Levine,M., McGinn,S., Tsagaye,G., Geer,K., Krol,M., de  
 Jong,P. and Fraser,C.M.  
 Authors  
 Title  
 Journal  
 Comment  
 Mouse BAC End Sequences from Library RPCI-23  
 Unpublished (1999)  
 Other\_GSSs: RPCI-23-115K4.TV  
 Contact: Shaying Zhao  
 Department of Eukaryotic Genomics  
 The Institute for Genomic Research  
 9712 Medical Center Dr., Rockville, MD 20850, USA  
 Tel: 301 838 0200  
 Fax: 301 838 0208  
 Email: zshao@tifgr.org  
 Clones are derived from the mouse BAC library RPCI-23. For BAC  
 library availability, please contact Pletier de Jong  
 (pletier@jeong.med.buffalo.edu). Clones may be purchased from  
 BACPAC Resources (http://bacpac.med.buffalo.edu/orderingframe.htm)  
 or from Resea ch Genetics (info@resgen.com). BAC end page:  
 http://www.tifgr.org/tbdb/bac\_ends/mouse/bac\_end\_intro.html  
 Plate: 115 row: K column: 4  
 Seq primer: SP6  
 Class: BAC ends.  
 FEATURES  
 Location/Qualifiers  
 source  
 1..420  
 /organism="Mus musculus"  
 /mol\_type="genomic DNA"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="RPCI-23-115K4"  
 /sex="Female"  
 /lab\_host="DH10B"  
 /clone\_id="RPCI-23"  
 /note="Organ: Kidney/Brain; Vector: pBACs3.6; Site\_1:  
 EcoRI; Site\_2: EcoRI; Female C57BL/6J mouse kidney and/or  
 brain genomic DNA was isolated and partially digested  
 with a combination of EcoRI and EcoRI Methylase. Site  
 selected DNA was cloned into the pBACs3.6 vector at the  
 EcoRI sites. The ligation products were transformed into  
 DH10B electrocompetent cells (BRL Life Technologies)."  
 ORIGIN  
 Query Match 3.2%; Score 23; DB 26; Length 420;

Best Local Similarity 100.0%; Pred. No. 11;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 532 AAGGTAAAAATTTAAAGTAA 554  
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 DB 410 AAGGTAAAAATTTAAAGTAA 388  
 RESULT 3  
 B2728592 687 bp DNA linear GSS 03-MAR-2003  
 LOCUS  
 DEFINITION  
 OGFBS50TM\_ZM\_0.7\_1.5\_KB zea mays genomic clone ZMBSM0245103,  
 genomic survey sequence.  
 ACCESSION  
 B2728592  
 VERSION  
 B2728592.1 GI:28701840  
 KEYWORDS  
 GSS.  
 SOURCE  
 Zea mays  
 ORGANISM  
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
 clade; Panicoideae; Andropogoneae; Zea.  
 1 (bases 1 to 687)  
 Whitelaw,C.A., Quackenbush,J., Van Aken,S., Uterback,T.,  
 Resnick,A., Fraser,C.M., Buddman,M.A., Bedell,J.A., Rohlfing,T.,  
 Clutek,R.W., Numberg,A., Robbins,D. and Lakey,N.  
 Authors  
 Title  
 Journal  
 Comment  
 Consortium for Maize Genomics  
 Unpublished (2002)  
 Other\_GSSs: OGFBS50TC  
 Contact: Cathy Whitelaw  
 TIGR  
 9712 Medical Center Drive, Rockville, MD 20850, USA  
 Tel: 301-838-5843  
 Fax: 301-838-0208  
 Email: whitelaw@tifgr.org  
 Seq primer: TR  
 Class: sheared ends.  
 FEATURES  
 Location/Qualifiers  
 source  
 1..687  
 /organism="Zea mays"  
 /mol\_type="genomic DNA"  
 /strain="B73"  
 /db\_xref="taxon:4577"  
 /clone="ZMBSM0245103"  
 /clone\_id="ZM\_0.7\_1.5\_KB"  
 /note="Vector: pBCSK-1; Site\_1: HincII; 0.7-1.5 kb  
 methylation filtered genomic DNA library"  
 ORIGIN  
 Query Match 3.2%; Score 23; DB 26; Length 687;  
 Best Local Similarity 100.0%; Pred. No. 97;  
 Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 325 TATTATTACAGTTGTTTAA 347  
 ||||||||||||||||||||  
 DB 646 TATTATTACAGTTGTTTAA 668

RESULT 4  
CG094526/c 805 bp DNA linear GSS 20-AUG-2003

LOCUS  
DEFINITION PUF7B71TB ZM\_0.6.1.0\_KB Zea mays genomic clone ZMWBta0726L22,  
genomic survey sequence.

ACCESSION  
CG094526

VERSION  
CG094526.1 GI:33976820

KEYWORDS  
GSS.

SOURCE  
Zea mays

ORGANISM  
Zea mays

REFERENCE  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.

AUTHORS  
Whitelaw,C.A., Quackenbush,J., Van Aken,S., Uterback,T.,  
Resnick,A., Fraser,C.M., Yuan,Y., San Miguel,P., Ma,J. and  
Benneken,J.

TITLE  
Maize Genomics Consortium

JOURNAL  
Unpublished (2003)

COMMENT  
Other GSSs: PUF7B71TB  
Contact: Cathy Whitelaw

FEATURES  
Location/Qualifiers  
source 1..805  
/organism="Zea mays"  
/mol\_type="genomic DNA"  
/strain="B73"  
/db\_xref="taxon:4577"  
/clone="ZMWBta0726L22"  
/clone\_lib="ZM\_0.6.1.0\_KB"  
/note="Vector: PCR4-TOPO; Site 1: EcoRI; 0.6-1.0 kb high  
cot selected genomic DNA library"

ORIGIN  
Query Match 3.2%; Score 23; DB 29; Length 805;  
Best Local Similarity 100.0%; Pred. No. 9.3;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 470 AAATTGAAAATAATTAATAAA 492  
|||||

DB 315 AAATTGAAAATAATTAATAAA 293

RESULT 5  
CG060667/c 821 bp DNA linear GSS 19-AUG-2003

LOCUS  
DEFINITION PUCW74TD ZM\_0.6.1.0\_KB Zea mays genomic clone ZMWBta0639N03,  
genomic survey sequence.

ACCESSION  
CG060667

VERSION  
CG060667.1 GI:33932847

KEYWORDS  
GSS.

SOURCE  
Zea mays

ORGANISM  
Zea mays

REFERENCE  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.

AUTHORS  
Whitelaw,C.A., Quackenbush,J., Van Aken,S., Uterback,T.,  
Resnick,A., Fraser,C.M., Yuan,Y., San Miguel,P., Ma,J. and  
Benneken,J.

TITLE  
Maize Genomics Consortium

JOURNAL  
Unpublished (2003)

COMMENT  
Other GSSs: PUCW74TB  
Contact: Cathy Whitelaw

FEATURES  
Location/Qualifiers  
source 1..821  
/organism="Zea mays"  
/mol\_type="genomic DNA"  
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/db\_xref="taxon:4577"  
/clone="ZMWBta0639N03"  
/clone\_lib="ZM\_0.6.1.0\_KB"  
/note="Vector: PCR4-TOPO; Site 1: EcoRI; 0.6-1.0 kb high  
cot selected genomic DNA library"

ORIGIN  
Query Match 3.2%; Score 23; DB 29; Length 821;  
Best Local Similarity 100.0%; Pred. No. 9.2;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 470 AAATTGAAAATAATTAATAAA 492  
|||||

DB 269 AAATTGAAAATAATTAATAAA 247

RESULT 6  
CG094522 869 bp DNA linear GSS 20-AUG-2003

LOCUS  
DEFINITION PUF7B71TB ZM\_0.6.1.0\_KB Zea mays genomic clone ZMWBta0726L22,  
genomic survey sequence.

ACCESSION  
CG094522

VERSION  
CG094522.1 GI:33976816

KEYWORDS  
GSS.

SOURCE  
Zea mays

ORGANISM  
Zea mays

REFERENCE  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.

AUTHORS  
Whitelaw,C.A., Quackenbush,J., Van Aken,S., Uterback,T.,  
Resnick,A., Fraser,C.M., Yuan,Y., San Miguel,P., Ma,J. and



TITLE Bennettzen, J.  
JOURNAL Maize Genomics Consortium  
COMMENT Unpublished (2003)  
Other\_GSSs: PUF0397B  
Contact: Cathy Whitelaw  
TIGR

9712 Medical Center Drive, Rockville, MD 20850, USA  
Tel: 301-838-5843  
Fax: 301-838-0208  
Email: whitelaw@tigr.org  
Seq primer: 7F  
Class: sheared ends.

FEATURES  
source location/Qualifiers  
1..869  
/organism="Zea mays"  
/mol\_type="genomic DNA"  
/strain="B73"  
/db\_xref="taxon:4577"  
/clone="ZMWBTA0726122"  
/note="Vector: PCR4-TOPO; Site\_1: EcoRI; 0.6-1.0 kb high  
Cot selected genomic DNA library"

ORIGIN  
Query Match 3.2%; Score 23; DB 29; Length 869;  
Best Local Similarity 100.0%; Pred. No. 9.1;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 470 AAATTGAAATTAATTAATAA 492  
|||||  
Db 787 AAATTGAAATTAATTAATAA 809

RESULT 7  
CG083261 913 bp DNA linear GSS 20-AUG-2003  
LOCUS PUF0397B ZM 0.61.0\_KB Zea mays genomic clone ZMWBTA0707H06,  
DEFINITION genomic survey sequence.  
ACCESSION CG083261 GI:33965555  
VERSION CG083261.1  
KEYWORDS GSS.  
SOURCE Zea mays  
ORGANISM Zea mays

REFERENCE  
AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
1 (bases 1 to 913)  
Whitelaw, C.A., Quackenbush, J., Van Aken, S., Uterback, T.,  
Reenick, A., Fraser, C.M., Yuan, Y., San Miguel, P., Ma, J. and  
Bennetzen, J.

TITLE Maize Genomics Consortium  
JOURNAL Unpublished (2003)  
COMMENT Other\_GSSs: PUF0397B  
Contact: Cathy Whitelaw  
TIGR  
9712 Medical Center Drive, Rockville, MD 20850, USA  
Tel: 301-838-5843

FEATURES  
source location/Qualifiers  
1..913  
/organism="Zea mays"  
/mol\_type="genomic DNA"  
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/db\_xref="taxon:4577"  
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/note="Vector: PCR4-TOPO; Site\_1: EcoRI; 0.6-1.0 kb high  
Cot selected genomic DNA library"

ORIGIN  
Query Match 3.2%; Score 23; DB 29; Length 913;  
Best Local Similarity 100.0%; Pred. No. 9;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 470 AAATTGAAATTAATTAATAA 492  
|||||  
Db 689 AAATTGAAATTAATTAATAA 711

RESULT 8  
CG204442/c 913 bp DNA linear GSS 21-AUG-2003  
LOCUS PUCU857D ZM 0.61.0\_KB Zea mays genomic clone ZMWBTA0639001,  
DEFINITION genomic survey sequence.  
ACCESSION CG204442 GI:34095503  
VERSION CG204442.1  
KEYWORDS GSS.  
SOURCE Zea mays  
ORGANISM Zea mays

REFERENCE  
AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
1 (bases 1 to 913)  
Whitelaw, C.A., Quackenbush, J., Van Aken, S., Uterback, T.,  
Reenick, A., Fraser, C.M., Yuan, Y., San Miguel, P., Ma, J. and  
Bennetzen, J.

TITLE Maize Genomics Consortium  
JOURNAL Unpublished (2003)  
COMMENT Other\_GSSs: PUCU857B  
Contact: Cathy Whitelaw  
TIGR  
9712 Medical Center Drive, Rockville, MD 20850, USA  
Tel: 301-838-5843  
Fax: 301-838-0208  
Email: whitelaw@tigr.org  
Seq primer: 7F  
Class: sheared ends.

FEATURES  
source location/Qualifiers  
1..913  
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/mol\_type="genomic DNA"

/strain="g73"  
/db\_xref="taxon:4577"  
/clone\_id="ZM6740639001"  
/note="Vector: PCR4-TOPO; Site 1: EcoRI; 0.6-1.0 kb high  
Cot selected genomic DNA library"

Query Match 3.2%; Score 23; DB 29; Length 913;  
Best Local Similarity 100.0%; Pred. No. 9;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 470 AAATGAAATTAATTAATTA 492  
|||||  
DB 269 AAATGAAATTAATTAATTA 247

RESULT 9  
CG083259 940 bp DNA linear GSS 20-AUG-2003  
LOCUS PUFQD39TB.ZM.0.6.1.0.KB.Zea.mays.genomic.clone.ZM6740707H06,  
DEFINITION genomic survey sequence.  
ACCESSION CG083259  
VERSION CG083259.1 GI:33965593  
KEYWORDS GSS.  
SOURCE Zea mays  
ORGANISM Zea mays

Eukaryote; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD  
clade; Panicoideae; Andropogoneae; Zea.  
1 (bases 1 to 940)

REFERENCE White, C.A., Quackenbush, J., Van Aken, S., Utecht, T.,  
Resnick, A., Fraser, C.M., Yuan, Y., San Miguel, P., Ma, J. and  
Benneken, J.  
Maize Genomics Consortium  
Unpublished (2003)  
Other GSSs: PUFQD39TD  
COMMENT Contact: Cathy White

TIGR 9712 Medical Center Drive, Rockville, MD 20850, USA  
Tel: 301-838-5843  
Fax: 301-838-0208  
Email: whitec@tigr.org  
Seq primer: TR  
Class: sheared ends.

FEATURES  
Location/Qualifiers  
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/strain="g73"  
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/clone\_id="ZM6740707H06"  
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Cot selected genomic DNA library"

ORIGIN

Query Match 3.2%; Score 23; DB 29; Length 940;  
Best Local Similarity 100.0%; Pred. No. 8.9;  
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 470 AAATGAAATTAATTAATTA 492  
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DB 565 AAATGAAATTAATTAATTA 543

RESULT 10  
BE184302 141 bp mRNA linear EST 22-JUN-2000  
LOCUS CMO-HT0674-080500-360-a04 HT0674 Homo sapiens cDNA, mRNA sequence.  
DEFINITION BE184302  
ACCESSION BE184302  
VERSION BE184302.1 GI:8663486  
KEYWORDS EST.  
SOURCE Homo sapiens (human)  
ORGANISM Homo sapiens

Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
1 (bases 1 to 141)  
Dias, Neco, E., Garcia, Correa, R., Verjovskij-Almeida, S., Briones, M.R.,  
Nagal, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F.,  
Goldman, G.H., Carvalho, A.F., Matsukuma, A., Bale, G.S., Simpson, D.H.,  
Brunstein, A., de Oliveira, P.S., Bucher, P., Jongeneel, C.V.,  
O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and  
Simpson, A.J.  
Shotgun sequencing of the human transcriptome with ORF expressed  
sequence tags  
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)

JOURNAL MEDLINE  
PUBMED  
COMMENT Contact: Simpson A.J.G.  
Laboratory of Cancer Genetics  
Ludwig Institute for Cancer Research  
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,  
Brazil  
Tel: +55-11-2704922  
Fax: +55-11-2707001  
Email: asimpson@ludwig.org.br  
This sequence was derived from the FAPESP/LICR Human Cancer Genome  
Project. This entry can be seen in the following URL  
(http://www.ludwig.org.br/scripts/gethtml2.pl?l=4&t=CMO-HT0674-080  
500-360-a04&t3=2000-05-08&t4=1)  
Seq primer: puc 18 forward  
High quality sequence start: 43  
High quality sequence stop: 139.

FEATURES  
Location/Qualifiers  
1..141  
/organism="Homo sapiens"  
/mol\_type="mRNA"  
/db\_xref="taxon:9606"  
/day\_stage="Adult"  
/clone\_id="HT0674"  
/note="Organ: head\_neck; Vector: puc18; Site 1: SmaI;  
Site 2: SmaI; A mini-library was made by cloning products  
derived from ORFESTS PCR (U.S. Letters Patent application

ORIGIN

ORIGIN  
No. 196,716 - Ludwig Institute for Cancer Research)  
profiles into the pUC 18 vector. Reverse transcription of  
tissue mRNA and cDNA amplification were performed under  
low stringency conditions."

**ORIGIN**

Query Match	3.1%	Score 22	DB 10	Length 141
Best Local Similarity	100.0%	Prod. No. 41		
Matches	22	Conservative	0	Indels 0
		Mismatches	0	Gaps 0

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Qy      212 CAATAGTGATGATAAAATGA 233
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Db      56 CAATAGTGATGATAAAATGA 35

```

RESULT 11

LOCUS	BH040485	461 bp	DNA	linear	GENE ID: 17-JUL-2001
DEFINITION	RPT1-24-300023.TJ RPT-24 Mus musculus genomic clone				
ACCESSION	RPT1-24-300023, genomic survey sequence.				
	BH040485				

ACCESSION	DN040400
VERSION	BH040485.1
KEYWORDS	GI:14819513
SOURCE	GSS.
	Mus musculus (house mouse)

## ORGANISM

REFERENCE  
1 (pages 1 to 461)  
Eukaryotes; Metazoa; Chordata; Craniata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus

## AUTHORS

TITLE Taagyeve,G., Geer,K., Krol,M., Shvartsbeyn,A.  
Rusbold,D., de Jong,P. and Frazer,C.M.  
Journal Mouse BAC End Sequences from Library RPECI-24  
COMMENT Unpublished (1999)  
Other\_GSSs: RPECI-24-300023.TV

**Contact: Shaying Zhao**  
Department of Eukaryotic Genomics  
The Institute for Genomic Research  
9712 Medical Center Dr., Rockville, MD 20850, USA  
shaying@igbmc.org

Tel: 301 838 0200  
Fax: 301 838 0208

Email: [szhaof@tigr.org](mailto:szhaof@tigr.org)  
Clones are derived from the mouse BAC library RP11-24. For BAC library availability, please contact Pieter de Jong ([pdj@tigr.org](mailto:pdj@tigr.org)). Clones may be purchased from BACPAC Resources (<http://www.chori.org/bacpac/orderingframe.htm>). BAC end plates: [http://www.tigr.org/cdb/bac\\_ends/mouse/bac\\_end\\_intro.html](http://www.tigr.org/cdb/bac_ends/mouse/bac_end_intro.html)  
Plates: 300 row: 0 column: 23  
Seq primer: Sp6  
Class: BAC ends.

**Class: BAC ends.**

## FEATURES

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1. .461
/organism="Mus musculus"
/mol_type="genomic DNA"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clono="RPCI-24-300023"
/sex="Male"
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## ORIGIN

Query Match	3.1%	Score 22;	DB 28;	Length 461;
Best Local Similarity	100.0%	Pred. No. 30;		
Matches 22;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;

Qy	667	ATAAATAGGAATTATAATA	688
Db	273	ATAAATAGGAATTATAATA	294

RESULT 12

LOCUS	529 bp	mRNA	linear	EST 10-MAY-2001
AM8288209				
DEFINITION	ra67h08.y1 Birc-Rao Meloidogyne incognita J2 Meloidogyne incognita			
CNA 5.1	similar to SW:INL4_HUMAN P49917 DNA LIGASE IV ;	mRNA		
sequence.				
accession				

ACCESSION	AW082829
VERSION	AW082829.1
KEYWORDS	EST.
SOURCE	Meloidogyne incognita

## ORGANISM

REFERENCE  
AUTHORS

Eukaryota; Metazoa; Chordata; Tylenchida; Tylenchidae; Tylenchoidea; Heteroceridae; Meloidogyninae; Meloidogynae.  
1 (bases 1 to 529)

McCarteer, J., Clifton, S., Chapell, B., Pape, D., Martin, J.,

TITLE	JOURNAL	COMMENT
The Washington Univ. Nematode EST Project, 1999	Unpublished (1999)	Contact: McCarter JP

The Washington Univ. Nematode EST Project, 1999  
Washington University School of Medicine  
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA  
Tel: 314 286 1800  
Fax: 314 286 1810

Email: est@watson.mstl.edu  
The library was constructed by Uma Rao and David Bird (david.blidncu.edu) at North Carolina State University. DNA Sequencing by: Washington University Genome Sequencing Center St. Louis.

Possible reversed clone: similarity on wrong strand  
Seq primer: -40RP from Gibco  
High quality sequence stop: 409.

**FEATURES .**  
**SOURCE**

1. .525

### Qualifiers

/organism="Meloidogyne incognita"  
/mol\_type="mRNA"  
/db\_xref="taxon:6306"  
/dev\_stage="enriched for 2nd stage juveniles"  
/lab\_host="XLRU"  
/clone\_lib="Bird-Rao Meloidogyne incognita J2"  
/note="Vector: ZAP express - pBKCMV (Stratagene), Site\_1:  
EcoRI; Site\_2: XhoI; Oligo (dT) primed library. cDNA was  
constructed and cloned unidirectionally into the vector  
within the 5' EcoRI and 3' XhoI sites. This library was  
constructed by Dr. Uma Rao and Dr. David Bird at North  
Carolina State University."

ORIGIN  
Query Match 3.1%; Score 22; DB 10; Length 529;  
Best Local Similarity 100.0%; Pred. No. 29;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 468 AGAATTGAAATTAATTAAT 489  
DB 80 AGAATTGAAATTAATTAAT 101

RESULT 13  
B1501692/c 552 bp mRNA linear EST 29-AUG-2001  
LOCUS B1501692  
DEFINITION rmo3H02.Y1 Meloidogyne arenaria egg PAMP1 v1 Chiapelli McCarter  
VERSION B1501692  
B1501692.1 GI:15352081  
KEYWORDS EST.  
SOURCE Meloidogyne arenaria  
ORGANISM Meloidogyne arenaria  
REFERENCE Eukaryota; Metazoa; Nematoda; Chromadorea; Tylenchida; Tylenchina;  
Tylenchoidea; Heteroderidae; Meloidogyninae; Meloidogyne.  
1 (bases 1 to 552)  
AUTHORS McCarter,J., Clifton,S., Chiapelli,B., Pope,D., Martin,J.,  
Wylie,T., Dante,M., Marra,M., Hillier,L., Kucaba,T., Theising,B.,  
Bowers,Y., Gibbons,M., Rlter,E., Bennett,J., Franklin,C.,  
Tsagarashvili,R., Ronko,I., Kennedy,S., Maguire,L., Beck,C.,  
Underwood,K., Stepcos,M., Allen,M., Person,B., Smaller,T.,  
Harvey,N., Schurk,R., Kohn,S., Shin,T., Jackson,Y., Cardenas,M.,  
McCamy,R., Waterston,R. and Wilson,R.  
TITLE The Washington Univ. Nematode EST Project, 1999  
JOURNAL Unpublished (1999)  
COMMENT Contact: McCarter JP  
The Washington Univ. Nematode EST Project, 1999  
Washington University School of Medicine  
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA  
Tel: 314 286 1800  
Fax: 314 286 1810  
Email: est@wustl.edu  
The library was constructed by Brandt Chiapelli and Dr. James  
(bchiapelli@wustl.edu & jmcarter@wustl.edu) at  
Washington University, St. Louis. DNA sequencing by: Washington  
University Genome Sequencing Center St. Louis. Nematodes were  
provided by Dr. David Bird and Daniel Snyder of North Carolina

State University.  
High quality sequence stop: 427.  
FEATURES  
source location/Qualifiers  
1..552  
/organism="Meloidogyne arenaria"  
/mol\_type="mRNA"  
/db\_xref="taxon:6304"  
/dev\_stage="egg"  
/lab\_host="DH10B"  
/clone\_lib="Meloidogyne arenaria egg PAMP1 v1 Chiapelli  
McCarter"

ORIGIN  
Query Match 3.1%; Score 22; DB 12; Length 552;  
Best Local Similarity 100.0%; Pred. No. 29;  
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 468 AGAATTGAAATTAATTAAT 489  
DB 224 AGAATTGAAATTAATTAAT 203

RESULT 14  
BH307917 582 bp DNA linear GSS 30-NOV-2001  
LOCUS BH307917  
DEFINITION CH230-4J17.TV CHORI-230 Segment 1 Rattus norvegicus genomic clone  
CH230-4J17, genomic survey sequence.  
VERSION BH307917.1 GI:17220325  
KEYWORDS GSS.  
SOURCE Rattus norvegicus (Norway rat)  
ORGANISM Rattus norvegicus  
REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;  
Rattus.  
1 (bases 1 to 582)  
AUTHORS Zhao,S., Shetty,J., Shatsman,S., Tsagaye,G., Geer,K.,  
Shvartsbeyn,A., Gbregedorgis,E., Overton,L., Russell,D., Chen,D.,  
Riggs,F., de Jong,P. and Fraser,C.M.  
TITLE Rat BAC End Sequences from Library CHORI-230 EcoRI segment  
JOURNAL Other GSSs: CH230-4J17.TJ  
COMMENT Unpublished (1999)  
Contact: Shaying Zhao  
Department of Eukaryotic Genomics  
The Institute for Genomic Research  
9712 Medical Center Dr., Rockville, MD 20850, USA  
Tel: 301 838 0200  
Fax: 301 838 0208

Email: szhao@tigr.org  
 Clones are derived from the rat BAC library CHORI-230  
 (http://www.chori.org/bacpac/rat230.htm). For BAC library  
 availability, please contact Pieter de Jong (pjejong@tigr.org).  
 Clones may be purchased from BACPAC Resources  
 (http://www.chori.org/bacpac/orering\_information.htm). BAC end  
 page: http://www.tigr.org/cdb/ends/rat/bac\_end\_intro.html  
 Plate: 4 row: J column: 17  
 Seq primer: 17

#### FEATURES

Location/Qualifiers  
 1..582  
 /organism="Rattus norvegicus"  
 /mol\_type="genomic DNA"  
 /strain="BN/SsNHsd/MCM"  
 /db\_xref="taxon:10116"  
 /clone="CH230-4J17"  
 /sex="Female"  
 /cell\_type="Brain"  
 /clone\_id="CHORI-230 Segment 1"  
 /note="Vector: pTARAC2.1; Site 1: EcoRI; Site 2: EcoRI;  
 CHORI-230 Rat (BN/SsNHsd/MCM) BAC library produced by  
 Pieter de Jong"

#### ORIGIN

Query Match 3.1%; Score 22; DB 28; Length 582;  
 Best Local Similarity 100.0%; Pred. No. 29;  
 Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 476 AAAAAATTAATTAATTAATGA 497  
 ||||||||||||||||||  
 DB 403 AAAAAATTAATTAATTAATGA 424

#### RESULT 15

LOCUS B0084733 197 bp mRNA linear EST 29-SEP-2003  
 DEFINITION B0084733 NIBB Mochii normalized Xenopus tailbud library Xenopus  
 laevis cDNA clone XL100e14 3', mRNA sequence.

ACCESSION B0084733  
 VERSION B0084733.1 GI:17580404  
 KEYWORDS EST.  
 SOURCE Xenopus laevis (African clawed frog)  
 ORGANISM Xenopus laevis

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;  
 Xenopodinae; Xenopus.

REFERENCE 1 (bases 1 to 197)  
 Kitayama, A., Teresaka, C., Mochii, M., Ueno, N., Shin-I, T. and  
 Kohata, Y.

TITLE Expressed genes in X. laevis embryo  
 JOURNAL Unpublished (2001)  
 COMMENT Contact: Tadao Shin-I  
 Center for Genetic Resource Information  
 National Institute of Genetics  
 1111 Yata, Mishima, Shizuoka 411-8540, Japan  
 Tel: 81-539-81-6856

Fax: 81-539-81-6855  
 Email: tsbini@genes.nig.ac.jp  
 The information of this clone is available through the following  
 URL.

#### FEATURES

Location/Qualifiers  
 1..197  
 /organism="Xenopus laevis"  
 /mol\_type="mRNA"  
 /db\_xref="taxon:8355"  
 /clone="XL100e14"  
 /class\_type="whole embryo"  
 /dev\_stage="stage 25"  
 /clone\_id="NIBB Mochii normalized Xenopus tailbud  
 library"

#### ORIGIN

Query Match 2.9%; Score 21; DB 12; Length 197;  
 Best Local Similarity 100.0%; Pred. No. 1.1e+02;  
 Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 407 AAAAAACACACACGAATTC 427  
 ||||||||||||||||||  
 DB 103 AAAAAACACACACGAATTC 123

Search completed: October 15, 2004 06:23:57  
 Job time : 3410.09 secs